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# New Venture Modeling Strategies for Information Technology Business Startups

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*Walden University*

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# Walden University

College of Management and Technology

This is to certify that the doctoral study by

Jude Thomas

has been found to be complete and satisfactory in all respects,  
and that any and all revisions required by  
the review committee have been made.

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Walden University  
2020

Abstract

New Venture Modeling Strategies for Information Technology Business Startups

by

Jude Thomas

MBA, Capella University, 2014

BS, Springfield College, 2012

Doctoral Study Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Business Administration

Walden University

October 2020

## Abstract

Information technology (IT) startup owners often lack new venture modeling strategies to sustain their businesses beyond 5 years. Information technology startup owners with backgrounds in software development, IT project management, and computer engineering need to know about the strategies discovered in the study to make operational, modeling, and project level decisions that ensure sustained organizational profitability. Grounded in Kim and Mauborgne's blue ocean theory, the purpose of this qualitative multiple case study was to explore new venture modeling strategies some information technology startup owners use to sustain their businesses beyond 5 years. Study participants comprised 3 IT startup business owners in California, operating successful businesses beyond 5 years. Data were collected from semistructured interviews, information publicly available on participants' firm websites, sustainability databases, and participants' firm sales sheets. Thematic data analysis was used to analyze the data; 4 themes emerged: (a) disruptive technology/selling, (b) value/cost tradeoff, (c) agility in technology, and (d) data analysis. A key recommendation is for IT startup business owners to develop innovative products that are first to market to scale and succeed beyond 5 years. Implications for positive social change include the potential for increased IT firm startup tax revenues, which will improve community social programs. The study findings will add knowledge that helps information technology startups owners craft new venture modeling strategies to support sales and sustainability.

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## Dedication

I thank The Creator in whose Hand my existence resides. I dedicate this doctoral research to my better half, Kalila, who set things in high gear by believing in me. To my parents for their strong belief in education and success in every facet of my life. To my late brother, I will forever walk with you in my heart. To my children who fuel my motivation every day. To my family whose support is undying without stint. To my fellow in study and friend, Angela Welbaum, for her valuable advice and undying loyalty in this journey and in business. Last, to my friends and associates who have been encouraging in ways I never thought possible.

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## Section 1: Foundation of the Study

Information technology startup business owners who successfully operate for more than 5 years represent a part of the 10% of small businesses that succeed (U.S. Small Business Administration, 2018). Startup businesses fail 90% of the time and some fail because of a lack of new venture models. The focus of this qualitative multiple case study was to explore some of the new venture modeling strategies that information technology startup business owners with 5 years or more of business success describe as key to their sustainability. Recognizing the venture modeling strategies that increase information technology startup success rates could result in an increase in employment opportunities and stimulate job growth in the United States. Blue ocean strategy is a concept introduced by Kim and Mauborgne (2015) to describe and apply value innovation pertaining to new market creation where competition is irrelevant. The use of the blue ocean strategy can help business owners discover and capitalize from market opportunities and deliver exemplary products and services that lead to customer satisfaction and a higher return on investments.

### **Background of the Problem**

Information technology startup owners face competitive challenges to succeed in their business segment. The competitive leaders from Facebook and Google dominate the business segment of social media. The new venture strategies include the blue ocean strategy, and uncontested markets, which could help information technology startups maintain success in their businesses (Jackson, Gopalakrishna-Remani, Mishra, & Napier, 2016). The impact of new venture modeling strategies could inspire innovations that

bring information technology discoveries that public and private sectors find beneficial contributing to organizational growth (Jackson et al., 2016).

The effect of information technology innovation could continue to benefit startup businesses and the public who could use innovative developments (Kim & Mauborgne, 2015). Information technology startup owners embark upon a course with risks when pursuing new venture modeling strategies. As entrepreneurs, information technology startup owners are decision makers who seize opportunities to innovate (Wang, Malthouse, & Krishnamurthi, 2015). Information technology startup owners often network through the Internet for sustainable sales and distribution of their products while staying off competition in the areas of (a) telehealth care, (b) artificial intelligence, (c) cybersecurity, and (d) wireless technologies to create strategic venture modeling (Christofi, Leonidou, Vrontis, Kitchen, & Papasolomou, 2015). According to Borgman (2015), building a lasting organization in the current business environment requires continuous creation of products and services that are innovative. Startup business owners who do not maintain stride with information technology innovations find their businesses losing market share (Kim & Mauborgne, 2015). In the present study, I explored the researched and experienced venture-modeling strategies used by information technology startup business owners to sustain beyond 5 years.

### **Problem Statement**

New information technology startup businesses fail to secure sufficient financial resources, utilize strategic plans, and successfully commercialize their products and/or services beyond 5 years (Santisteban & Mauricio, 2017). More than 80% of startups in

some parts of the world fail within one year and only one third of U.S.-based small business startups survive 10 years (Hyder & Lussier, 2016; U.S. SBA, 2018).

The general business problem was some small and medium information technology companies fail to survive long term. The specific business problem was some information technology startup owners lack new venture modeling strategies to sustain their businesses beyond 5 years.

### **Purpose Statement**

The purpose of this qualitative multiple case study was to explore new venture modeling strategies that some information technology startup owners use to sustain their businesses beyond 5 years. The use of public records of the startup businesses and the use of observation of the startup businesses was used as evidence that the companies use new venture modeling strategies in their operations. The targeted population consisted of three owners from different information technology startups within a 100-mile radius of Silicon Valley in California, who have used venture modeling strategies to sustain their businesses for more than 5 years. The findings from this research may contribute to social change by identifying successful venture modeling strategies that information technology startup owners can use to enhance global education remotely. These findings could enable startup owners to extend social responsiveness using more technology for creating expedient health care, more jobs, and empowerment initiatives to individuals with community news and information.

### **Nature of the Study**

The three research methods are qualitative, quantitative, and mixed method. The appropriate research method for this study was a qualitative study. In qualitative research, an in-depth description of the study involves developing or conducting descriptive knowledge about the research setting, observations, processes, and study participants of the phenomenon (Marshall & Rossman, 2016). The purpose of this study was to explore new venture modeling strategies, which required collecting and analyzing multiple qualitative data sources. Quantitative research was not appropriate for this study because a quantitative researcher generates detailed data regarding a subject and examines statistical variable relationships and differences (Palinkas et al., 2015). A quantitative method was not appropriate for addressing the specific business problem in this study because I did not seek to examine variable relationships or differences. A mixed-method approach was not appropriate for this study because no need existed for both quantitative and qualitative data to identify and explore new venture modeling strategies startup owners use to sustain new technology startup businesses. The mixed method is a combination of qualitative and quantitative methods (Palinkas et al., 2015).

The qualitative designs that I considered for this study were multiple case study design, phenomenology, ethnography, and narrative inquiry. I used a multiple case study design to collect and analyze data types and sources to identify the new venture modeling strategies some information technology startup owners used to sustain their new businesses beyond 5 years. Instead of a single case study, I used a multiple case study because researchers using case studies depend on multiple data types and sources for

evidence to study a phenomenon (Yin, 2017). Researchers use phenomenological designs to analyze how participants undergo and consider experiencing events (Tyrer, Reed, & Crawford, 2015). Ethnography is the study of a methodical review and recording of human cultures (Hammersely, 2018). The focus of this study was a multiple case study design that I used to observe, collect, and analyze data types and sources to identify the new venture modeling strategies some information technology startup owners need to sustain their new businesses beyond 5 years. Narrative inquiry is the study of ways humans experience the world through obtaining participants' stories (Wahyuni, 2012), which also was not the focus of this study.

### **Research Question**

The research question guiding this study was: What new venture modeling strategies do information technology startup owners use to sustain their businesses beyond 5 years?

### **Interview Questions**

1. What new venture modeling strategies have you used to manage your information technology startup business during the first 5 years of operation?
2. What new venture modeling strategies are most helpful to you in successfully managing your information technology startup business?
3. How are you using new venture modeling strategies to address the market competition?



4. What, if any, new venture modeling strategies are you implementing to create untapped market space in your business?
5. What are the barriers you encountered in using new venture modeling strategies to manage your information technology startup?
6. How did you address the key barriers to implementing your venture modeling strategies?
7. What value innovation strategy are you using to successfully sustain your technology startup business?
8. What additional information would you like to share regarding new venture modeling strategies that we have not already discussed?

### **Conceptual Framework**

The conceptual framework for this study was the blue ocean theory. Kim and Mauborgne introduced the blue ocean theory in 2005 (Kim & Mauborgne, 2015). Kim and Mauborgne explained the concept of blue ocean theory as the best strategy to create uncontested market space set for positive sales returns and organizational growth. Kim and Mauborgne stated that the coupled pursuit of high product differentiation and low cost would cause the competition to become irrelevant. The measurable objectives of blue ocean theory are (a) create untapped market space, (b) increase profit, and (c) use strategy value innovation (Kim & Mauborgne, 2015). Blue ocean is a strategic tool used in conceptual framework for conducting strategic business actions. Because blue ocean strategy is used for such business moves, blue ocean strategy was fitting for use in the present study. The study results proved helpful in determining if managers using blue

ocean theory can enable new information technology-based startups to sustain their businesses successfully beyond the first 5 years of operation.

### **Operational Definitions**

*Blue ocean:* Blue oceans are uncontested or new markets with no competitors. (Kim & Mauborgne, 2015).

*Competitive advantage:* Competitive advantage is the invisible component of the strategy, where the quality of a product or service supersedes qualities that the competitors' lack (Fillingim, 2018).

*Information Technology:* Information technology is the science and activity of using computers and software, to store, manipulate, and send information (Sanchez, 2017).

*Red ocean:* The definition of a red ocean is the known areas of a market; where all businesses exist and all the boundaries, limitations, and play laws are clear (Kim & Mauborgne, 2015).

*Startup:* A young innovative, growth-oriented business that is looking for long-term sustainable business model (Groesser & Jovy, 2016).

### **Assumptions, Limitations, and Delimitation**

#### **Assumptions**

Assumptions give clarity and add perspective to the topic, however, when taken for granted by the researcher can cause misunderstanding (Parker & Northcott, 2016).

An assumption is a belief without proof (Parker & Northcott, 2016). The first assumption was that the interviewees and I would conduct ourselves in an ethical fashion. The

second assumption was the participants were honest and would give true answers to the interview questions. The third assumption was that the participants' answer to the interview questions could answer the research question.

### **Limitations**

Limitations are the researcher's claims about generalizability or conclusiveness that derive from the conceptual framework or research design (Marshall & Rossman, 2016). The limitations of a study represent the potential of the results pertaining to directions for future research (Aguinis, Ramani, & Alabduljader, 2018). Limitations could be due to scheduling conflicts for accessing the participants in the study.

Limitations also include the types of new venture modeling strategies participants' use, which may not represent the entire information technology industry. Last, the possible withholding of valuable information by the startup owners for fear of losing advantages in the industry could limit the findings from the study.

### **Delimitations**

Delimitations are the scope and boundaries of the study. The delimitations are the frame of the study in context and its lack of transferability from a control area (Marshall & Rossman, 2016). The boundaries of this study were the three owners of information technology firms and the Silicon Valley, California geographic area of the businesses in this study.

### **Significance of the Study**

The significance of the study was the potential of discovering new venture modeling strategies that could apply to information technology startups. Discovering

new venture modeling strategies can apply in two ways: motivational environments for employees representing a contribution to successful business practice, and the betterment of lifestyle for employees and consumers representing implications for social change. Information technology employees receive good healthcare, live in quality environments, and earn wages from solid business practices. The blue ocean theory has the potential value to help owners of information technology businesses sustain and sustain beyond the first 5 years.

### **Contribution to Business Practice**

The objective of this qualitative multiple case study was to explore strategies information technology startup owners use to successfully maintain sustainability for years after launch in the technology sector. Business owners could use the results of this study to find revenue boosting models, sustainable growth strategies, and successful strategies fellow business owners use to sustain their business ventures. Business owners may also find beneficial initiatives to identify and capitalize from currently uncontested markets. The introduction of the strategies resulting from the findings of this study could help information technology owners and other business owners create innovative ideas to sustain growth 5 years beyond the business launch. In addition, business owners could benefit from the results of this study leading to the potential of new venture modeling strategies creating a larger profit margin.

### **Implications for Social Change**

The outcomes of this study could positively influence social change through stress-free environments where resources leading toward a good life are abundant and

could lead to a guide to community growth. The implications could include happier employees, who could pass on these benefits to their communities. Proven findings from this study may provide business owners with information to enhance local economies, possibly reducing the chance of the social decline in the communities. If more startups are successful, increased tax revenues are possible, and these tax revenues may contribute to improving community social programs and infrastructure.

### **A Review of the Professional and Academic Literature**

The study included Kim and Mauborgne's blue ocean theory (2015), I used Kim and Mauborgne's blue ocean theory (2015) as the conceptual framework of the study to relate business success factors of information technology startups during the first 5 years. The primary data resource for this study was the Walden University Library. Key terms used to field information on the topic included the blue ocean strategy, competitive advantage, information technology, red ocean strategy, and business startup. The primary objective was to compile relevant scholarly peer-reviewed literature, which pertained to the research topic with a minimum of 85% of the literature published within 5 years of my proposed graduation date.

This literature review includes studies of peer-reviewed articles, books, journals, and scholarly articles of which 85% published within 5 years to date. I reviewed the blue ocean theory, which served as the conceptual framework for this study. The blue ocean theory served as a guide to new venture modeling for business owners of information technology startups to sustain beyond 5 years or more.

The literature review was comprised of sources retrieved online, with peer-reviewed articles published in the last 5 years from 2015 to 2019. The literature review was structured with 4 major sections: (a) theory including an overview of blue ocean theory as well as other theories I considered, (b) history and challenges of start-ups, (c) new venture modeling and innovation, and (d) the application of blue ocean theory to solve this business problem. This literature review includes references from Business Source Complete, Google Scholar, ProQuest Central, and dissertations from Walden University. The literature review includes a total of 136 citations with 119 as peer-reviewed: 86% were published within 2015-2019 and 14% were older than 2015. Table 1 contains the list in completion. The purpose of this qualitative multiple case study was to explore new venture modeling strategies that some information technology startup owners use to sustain their businesses beyond 5 years.

Table 1

*Types and Counts of References*

	Recent (within 5 years of 2019)	Before 2015	Total	% of total references
Books	1	0	1	.72%
Dissertations	0	0		
Peer-reviewed articles	119	17	136	86%
Total	120	17	137	86% (>85%)

## **Conceptual Framework**

The conceptual framework of the proposed qualitative study included common themes from the literature review and blue ocean theory. Information technology startup owners may benefit from the blue ocean theory and new venture modeling strategies to successfully sustain their businesses beyond 5 years. A technology startup owner approach to new venture modeling strategies may influence the success of a business. Kim and Mauborgne (2015) argues the mindset of the entrepreneur was one that embraced risk taking more readily and pursued innovation more diligently. Notable to mention, Silicon Valley business startup owners might pursue uncontested markets to build and sustain success beyond the first 5 years of operation.

The blue ocean theory of Kim and Mauborgne (2015) served as the conceptual framework for this study. Kim and Mauborgne introduced the blue ocean theory in 2005. Kim and Mauborgne explained the concept of blue ocean theory as the best strategy to create uncontested market space set for positive sales returns and organizational growth. In this theory, Kim and Mauborgne stated that the pursuit of high product differentiation and low cost could cause the competition to become irrelevant. The measurable points of blue ocean theory are to (a) create untapped market space, (b) increase profit, and (c) use strategy value innovation (Kim & Mauborgne, 2015). In consideration of this study, the research could be helpful for determining if the outcomes in businesses using blue ocean theory may enable technology startup owners to use new venture modeling strategies to sustain their businesses successfully beyond the first 5 years of operation.

## **Blue Ocean Theory**

Blue ocean theory is the concept of creating products and services in new uncontested markets (Kim & Mauborgne, 2015). The theory includes a “strategy canvas”, which is a central diagnostic tool and an action framework for moving towards a blue ocean strategy (Kim & Mauborgne, 2015). The process of identifying the competitor’s faults and reaching the customers with new value offerings is the objective of the blue ocean theory. Creativity stems from going beyond the internal perceptions of the owners and viewing of the products and services from the lens of the consumer. The strategy canvas includes principles a business owner in information technology startups could use to organize, repackage, redress, and redraw the borders of its market. In the process, the owner of the organization could detach from long-held practices regarding demand and embrace creative and innovative trends. In the 1990s, new waves of competing businesses for market share arose such as the Internet and ecommerce.

Through various applications of the blue ocean theory, applying the principles of the theory to practice could lead business owners to succeed in new and well-established industries by incorporating this innovation-based platform. The theory is for marketers, entrepreneurs, and businesspeople to move from the competitive red ocean businesses, where the market is competitive, to blue oceans where the market is uncontested. Marketers, entrepreneurs, and businesspeople move to blue oceans to help the success of their businesses.

Blue ocean strategy consists of six principles for business owners to create and implement to lower risk and maximize opportunity in business building (Kim &



Mauborgne, 2015). First, reconstructed market boundaries can create uncontested space in market segments across industries. Second, information technology startup owners could focus on the big picture, not the numbers, in order to build a business outside of conventional accounting and strategic planning which lead to incremental improvements. Third, information technology startup owners need to reach beyond existing demand to create the greatest demand for a product or service. Fourth, information technology startup owners could plan the strategic sequence properly in order to produce and maintain profitable growth. This sequence includes utility, price, cost, and adoption requirements, which will lower risk when properly applied. Fifth, the owners could overcome key organizational hurdles that block the creation of a blue ocean strategy. The hurdles include cognitive, resource, motivational, and political issues managers must overcome to successfully implement the blue ocean strategy. Last, the owners could build execution into strategy in order to motivate people to apply blue ocean strategy over a long period. Applying these principles can manage the risk presented by the human element in an organization, in particular the attitudes and behaviors of those in the business of information technology.

### **Evolution of Blue Ocean**

In the 1990s, new waves of competing for technology market share arose such as the Internet and ecommerce. Trends soon to follow included mobile media and real-time media (Barthet, Fazekas, Allik, Thalmann, & Sandler, 2016). The advances since the 1990s to 2019 in technology affects other areas including transportation and communication, which leads to the information flow of business ideas globally

(Warnecke, 2017). With the advent of the Internet, people in the world witnessed a streamlined and inexpensive means by which to interact on a worldwide level personally and as consumers and business entities (Khan et al., 2017). The Internet enabled global awareness of products and services, positive or negative (Khan et al., 2017).

Kim and Mauborgne (2015) set a foundation to conceptualize, create, and implement blue ocean strategies. Kim and Mauborgne examined the successful execution of 108 companies comprising of large size businesses. The frameworks designed by Kim and Mauborgne provide business owners a way out of competition-riddled environments – red oceans – and means to enter uncontested market space called blue ocean (Kim & Mauborgne, 2015).

An examination of how to apply these frameworks to small businesses could help small business owners create sustainability beyond 5 years. The strategy canvas is a tool that helps business owners develop services and products to create change for the better of the consumer (Kim & Mauborgne, 2015). Using the strategy canvas, information technology business owners develop views of their businesses that differ from competitors. The strategy canvas helps business owners reach outcomes to sustain business beyond 5 years. The strong point of the strategy canvas is the value curve, which provides a layout of a company's products and services and how these items factor in the specific industry of their business. Often, outcomes conclude that consumers want like products at a lesser cost and the strategy canvas also helps information technology business owners find ways to attract new consumers (Elfarmawi, 2019). Upon completion of the strategy canvas, the four actions framework tool applies. The four

actions framework tool consists of eliminate-reduce-raise-create grid. The four actions framework instructs an information technology business owner to eliminate factors competed in the industry; reduce and eliminate the old and elevate factors well above industry's standards. The business decision makers that choose a blue ocean strategy included are Cirque du Soleil, a number of entertainment shows, which created an uncontested segment by melding elements of the circus without the animal acts (Kim & Mauborgne, 2015).

**Value innovation strategy.** Value innovation is developing value for consumers, making the competition irrelevant, and thereby creating an uncontested marketpace (Kim & Mauborgne, 2015). New venture models created from value innovation include Apple iPads in early 2001, cellphones in 1973, Southwest Airlines, and Cirque de Soleil. Kim and Mauborgne (2015) described the concepts leading to the success of the mentioned companies, along with information from more than 100 companies over a 100-year period, all leading to the framework now known as blue ocean. Since some information technology startup owners lack new venture modeling strategies to sustain their businesses beyond 5 years, using blue ocean strategies could help their businesses.

Blue ocean strategy serves as the means to leave the competitors behind and create new markets (Kim & Mauborgne, 2015). At the center of Kim and Mauborgne's (2015) tools for success in blue ocean strategy is the concept which drives growth and profitability known as strategic move, which when executed by business owners could lead to success. After researching 30 industries, the outcome for Kim and Mauborgne was their blue ocean strategy (Kim & Mauborgne, 2015). Some information technology

startup owners lack new venture modeling strategies to sustain their businesses beyond 5 years, using blue ocean strategies could help their businesses.

### **Supporting and Contrasting Models**

**Competitive advantage theory.** Introduced by Porter and Millar (1985), competitive advantage theory aligns by company owners to create sustainable and competitive businesses. Managers seeking to gain a competitive advantage should have a valid route to success. In this case, blue ocean strategy could be useful since some information technology startup owners lack new venture model strategies to sustain their businesses beyond 5 years. Fillingim (2018) posited a strategy to create and maintain a strategic advantage that could lead to higher satisfaction rates from business customers compared to their competitors. Additionally, considering the value of competitive advantage, the designation that competitive advantage is a process of continuous improvement and creative reengineering supported through investments adds to the product or service elements that generate value (Fillingim, 2018). Fillingim stated that maintaining a competitive advantage over a period brings strategic or sustainable advantages, and a competitive advantage improves the dynamics of an organization and contributes to eliminating waste. Blue ocean strategy and competitive advantage strategy are tools for information technology business owners to avoid strong competition (Agnihotri, 2015).

Conversely, Downing, (2018) argues that competitive advantage is a theoretical approach to value creation and appropriation process that works by including elements of capital, politics, price elasticity, value creation appropriations, and mobility barriers.

Downing, (2018) stated that capital has three forms of competitive advantage: economic, cultural, and social. The economic capital is convertible to money (Downing, 2018). Cultural capital is formal and informal within the organization and represents an internal component of the organization that is not transferrable. Downing, (2018) described social capital as an individual investment comprised of social connections and credential, amounting to a perceived credit for the individual. Through blue ocean strategies, a business owner could discover social capital as a new venture strategy to help sustain their business beyond 5 years.

The cost leadership strategy could lead to business owners developing an advantage in circumstances where company owners compete on cost advantages not related to organizational capabilities (Wada, 2018). A cost leadership strategy is a tool that company owners use for efficiency improvements and cost reductions in the development and production processes related to organizational learning (Wada, 2018). In contrast, build-to-order personal computer manufacturers from Dell computers devised an operation without manufacturing capabilities, founded on procurement of generic modules and an assembly concept that employees with little experience can operate. This process may help information technology startup owners with a new venture modeling strategy to sustain their business beyond 5 years.

A system created by Fujimoto leaders (2001) helped to provide just in time, short delivery times, and adaptability to model and quantity changes. Dell leaders provided a more progressive solution than IBM and Hewlett Packard. As with Dell's personal computers, a cost leadership strategy fails with highly modularized architecture (Kremer

et al., 2016). For a cost leadership strategy to sustain in the long-term, leaders must provide greater improvements in design and production. For example, a case of consumers who anticipate safer cars to have better rides, fuel consumption, and reduce environmental load are the appropriate objectives. Firm leaders can benefit from a competitive advantage because of leadership with current sales increasing by advertising, which causes awareness (McAllister, Srinivasan, Jindal, & Canella, 2016). Another comparison theory is the resourced based managerial view by Harney and Trehy, (2016).

**Resource-based view.** The resource-based view is a managerial tool for determining strategic resources that when applied by management could possibly deliver a competitive advantage for a firm (Harney & Trehy, 2016). Harney and Trehy, (2016) intentions were for managers to analyze the firm from the resource side rather than the product side. Minimum studies exist that assess the strategy of international brands pertaining to market-based theory and social media users in local markets (Gao, Tate, Zhang, Chen, & Liang, 2018). Gao et al., (2018) argue that three resource-based attributes correlate to the success of international brand's social media local market use; value, inimitability, and rarity. Value, distinctiveness, and quality could prove beneficial to business startup owners since some information technology startup owners lack new venture modeling strategies to sustain their businesses beyond 5 years.

Value is the foundation for relational resource in social media. Inimitability and rarity together are the international brand strategy focal points. Gao et al., (2018) conclude that a combination of incentives presented in social media should specifically focus to brand type and user tie. The research into international marketing has been

developed from resource-based strategy and concludes that market-based relational ties (social ties linking international brand to local consumers) are valuable components for doing business in local markets and not easy for competitors to imitate (Gao et al., 2018). This strategy is in line with competitive advantage strategy.

**Social Media Word-of-Mouth.** Social media word of mouth is the conveyance of data coming from one person to another person (Haikel-Elisabeh, Zhao, Ivens, & Brem, 2019). To assess social media word-of-mouth (WOM), management must use measurements by volume (e.g., the number of messages transmitted) or valence (e.g., the sentiment of the disseminated information). Measurements by volume of social media word of mouth could help information technology startup business owners who lack new venture modeling strategies sustain their business beyond 5 years enabling owners to measure business progress. WOM used on social media platforms by managers can influence customers' product adoption by decreasing quality uncertainty while improving product awareness (Xitong & Wu, 2018). A key factor is, WOM social media could help manager's prompt online visitors to go to the site, in contrast, recommender-based WOM sites are useful after a site visit. WOM implementation helps a company drive sales through product awareness and with volume, helps influence product sales (Xitong & Wu, 2018). Using the WOM approach could help spread the innovative concepts created by information technology startup business owners.

**Structural role theory.** In the structural role theory, different user types dialogue and exchange in online communities (Akar, Markikyan, & Dalgic, 2019). These online environments allow professionals to view the motivations of the community members

and devise ways to keep the members engaged. From this understanding, professionals can provide goods and services that the members find needed and necessary. Sold goods and services contribute to the profit margin of company decision makers who serve these online communities. In addition, professionals can learn to develop motivational strategies to maintain a high level of satisfaction among all the users in such communities. For information technology, startup owners who lack new venture modeling strategies, understanding the motivations of community members and keeping them engaged could help sustain business beyond 5 years.

### **Competitive Advantage and Globalization**

The globalization of commerce through information technology known as e-commerce increased competition domestically and globally as products are copied pre- and post-launch (Jordan, 2018). Jordan (2018) posit to maintain competitive advantage; organizations need to increase marketing strategies to improve short product life cycles. According to Jimenez and Zheng, (2018), the global startup revolution grew from \$140 billion in 2017 for global venture capital investments startups. The total value creations of the global startup economy from 2015 to 2017 reached \$2.3 trillion, representing a 25.6% increase from 2014 to 2016 (Jimenez & Zheng, 2018).

The information technology sector's momentum in the early years included global social media apps, digital media, and Internet companies (Jimenez & Zheng, 2018). The new dynamic in the sector such as fintech, cybersecurity, and blockchain signal a new direction in tech startups. This new direction in tech startups, coupled with Silicon Valley as the leading information technology location is advantageous. Recently,



companies in (a) Frankfurt, (b) Tel Aviv, (c) Prague, and (d) Toronto are becoming a presence for the aforementioned new tech startups (Jimenez & Zheng, 2018). With this new wave of information technology startups comes a level of success that startup owners realize in addressing partnerships with Uber in the mobility area and Airbnb in peer-to-peer hospitality service (Pappas, 2017). More information technology startups in this new wave that could contribute to a decrease in the number of startups owners lacking new venture modeling strategies to sustain their businesses beyond 5 years.

Gunasekaran, Subramanian, and Rahman (2015) identified (a) global production strategies, (b) reduced cost, (c) increased quality, and (d) production allotment that are advantageous for a country while reducing production in other areas that are less advantageous. Other country leaders became significant in recent years, while the United States, maintained the highest number of companies valued at \$1 billion with 65% hailing from the United States in 2016-2017 (Gunasekaran, Subramania, & Rahman, 2015). In the competitive information technology landscape, startups owners create an opportunity for the ecosystem builders to pay attention to startup subsectors. Blue ocean strategies could exist within the startup subsectors. An example of blue ocean strategy in startup subsectors is changing the automated call prompts to a business Chatbot, a computer design to encourage discussion, through artificial intelligence for a user-friendly experience.

### **Shortages in Successful Information Technology Startups**

Many reasons exist for shortages in successful information technology startups; economic downturns, lack of experienced employees, outsourcing the observation of the

business segment are a few reasons (Holstein & Eschenfelder, 2017). Challenges in information technology startups include barriers in the technology segment. For example, software startup owners with no operating history (lack of experience) may often merge and expect to revolutionize technologies (Mchawrab, 2016). Support services for information technology startup owners known as accelerators help produce fast growth of some startups (outsourcing the observation of the business); however, a large number of startups still fail at a greater rate (Holstein & Eschenfelder, 2017). Other issues include a shortage of qualified employees that could cause shortage of successful startups (Holzmann & Golan, 2016).

Managerial decisions concerning the management of technological innovations can present challenges for startups' success. Innovation input by employees' factor into what types of issues enhance and what factors impede innovations (Bubel, 2015). The determinations of success and failure relate to choices of the organization's management (Bubel, 2015). Bubel (2015), indicated, the organization, as a significant structure, built on systems, must coexist with other systems, which include innovation models and the environment. Following the steps of viewing the organization as a significant structure, built on systems, that coexists with other systems, including innovation models that could result in fewer shortages of successful startups. Warnecke (2017) posited technological investment is at the formal sector of the economy – the sector with more secure employment prospects. Investing in the informal (unregulated) sector is riskier since the operations often take place unknowingly, and may frequently close down (Autrey, Bova,

& Soberman, 2015). These impediments could contribute to, and cause shortages in successful information technology startups businesses.

### **Startup Challenges**

In the previous section, shortages in successful information technology startups are addressed and placed before this section on startup challenges. This section addresses the challenges that the successful few startups face - in succeeding among the rarer number of startups – that is, startups who sustain beyond 5 years. This includes as stated, misalignment, business locations, adoption to change, management risks for information technology startups. Overall, the current section presents a more detailed and deeper look at issues startup owners face. Startups of small and medium size businesses are integral to the economy because they represent job growth and 60% to 70% of job creation (Wiid, Cant, & Le Roux, 2016). Another factor is small businesses develop at a faster rate in some instances than larger businesses (Bravo-Biosca, Criscuolo, & Menon, 2016). In addition, small and medium size businesses factor in strong positions concerning the creation of employment and therefore creating revenue, which flows to the government through taxes (Adelino, Schoar, & Severino, 2015). Managers and other workers in the marketing end of business face a number of challenges in the development of startup marketing strategies, which could lead to some managers responding to the challenges more appropriately (Deligianni, Voudouris, & Lioukas, 2015). One of the proposed principles to the startup challenges is to reconstruct market boundaries to deal with the challenge of identifying blue ocean opportunities (Kim & Mauborgne, 2015). Reconstructing market boundaries could help some information technology startup

owners who lack new venture modeling strategies to sustain their businesses beyond 5 years.

Small and medium size businesses owners confront the challenge of human resources, financial issues, and marketing management (Holzmann & Golan, 2016). The challenges startup owners and managers experience include the adoption to change, organization commitment, and organization restructure caused by management (Wali, Uduma, & Wright, 2016). Other challenges include incorrect pricing strategies, wrong business locations, incorrect information which leads to little or no demand for the product or service caused by such misaligned strategies (Holzmann & Golan, 2016). Startup owners may also face challenges with resource scarcity in the planning and strategizing process (Holzmann & Golan, 2016). Kim and Mauborgne (2015) proposes building execution into strategy to motivate employees in the planning and strategizing process to apply blue ocean strategy to overcome risks in management. Overcoming management risks could help some information technology startup owners who lack new venture modeling strategies sustain their businesses beyond 5 years.

### **Relevance of New Venture Modeling**

New venture modeling has relevance in blue ocean theory relating to the components of innovation for information technology startup owners. Innovation is key to new venture modeling because of the type of factors that enhance and impede innovation and creativity (Bubel, 2015). Using organizational management to get the strategic sequence correct is one innovation factor that could provide insight to startup business owners in certain situations (Kim & Mauborgne, 2015). For example, the

manager could review the issues outside of the organization that need correction. Therefore, removal of issues for correct alignment and execution of the innovation process occurs (Bubel, 2015). New venture modeling and leadership is part of the anatomy of an innovation leader (Bubel, 2015). Bubel (2015) deduced that a strong link between business intent and design strategy exists, and could help shape business strategies, which lead to new venture modeling for information technology startup owners.

### **Venture Modeling Gaps**

Venture modeling gaps identified as management of business models in the first stages, the point at which an information technology startup failed, bad accounting and finance events, alongside fraud and earnings misstatements. Gaps in the field of entrepreneurship include how entrepreneurs manage their business models in the first stages of the startup (Kallio, Johnson, & Kangasniemi, 2016). Kallio, Johnson, and Kangasniemi (2016) posits that mobilizing resources in the early stages of business model management is an essential focus. Kallio, Johnson, and Kangasniemi's (2016) concluded that early-stage small ventures might benefit from developing a set of management activities to manage the venture's resource needs. Kallio, Johnson, & Kangasniemi (2016) conclusion could help information technology startup owners avoid venture modeling gaps and develop venture-modeling strategies useful to sustain their businesses beyond 5 years. The conclusion by Kallio, Johnson, and Kangasniemi (2016) is an important consideration concerning venture-modeling gaps when the severity of an information technology reflects failure. Benaroch and Chernobai (2017) posits that

operational information technology failures are comparable in severity to adverse accounting and finance events. For example, fraud and earnings misstatements may result in corporate governance changes (Agrawal & Cooper, 2017).

### **The Information Technology Landscape Frontier**

Differentiation could prove pivotal in the pursuit of technology (Newell, 2015). Solution to needs and problems some information technology startup business owners face concerning new venture modeling strategies to sustain their businesses beyond 5 years could serve as a means of differentiation. Salunkhe and Kadam, (2018), argued that solving problems before the competition allows business owners to create an efficiency advantage. Salunkhe and Kadam, (2018) did not use a traditional method of research, but incorporated examples from organizations who utilize innovation, knowledge funnel, and personal knowledge systems in order to construct a value base within their company. Special emphasis clarifies an owner's expectations and commitments, acknowledgement of a progressive momentum over time, and bringing on talented, innovative solutions before the competition. Kruger (2017) discussed how technological progress is more likely to augment certain production factors. Kruger (2017) found that affluent country leaders are prone to use skilled labor more than poor countries; however, poor countries are more efficient in enlisting unskilled labor. Kruger's discussion could include solutions for information technology startup owners who lack new venture modeling strategies sustain their businesses beyond 5 years.

The business environment, including the information technology segment has become more volatile, uncertain, complex, and ambiguous (Cook, 2016). A demand

exists for individuals and enterprise owners to become more ingenious to endure the turbulence during unexpected changes (Cook, 2016). Cook (2016) offered a view of the information technology emerging businesses that could align with blue ocean strategy, which includes innovation and ingenious concepts.

### **Information Technology Changes and Factors**

A notable issue of information technology changes includes information technology startups led by CEOs with prior experience in managing organizations continue to do well in the industry (Santisteban and Mauricio, 2017). Another factor is information technology in organizations must include speed, flexibility, integrity, and innovation to deliver winning outcomes (Yuliaty, 2017). In addition, the expectation of information technology users vary, prompting a greater level of strategies, methods, techniques, and efforts. Therefore, the possibility of blue ocean strategies for new venture modeling could appear effective in this type of information technology change. Kim and Mauborgne (2015), state that it is important to reach beyond existing demand – to reduce risks and address the greatest demand for a new offering. Using this principle by Kim and Mauborgne (2015) could help information technology startup business owners to overcome the lack of new venture modeling strategies to sustain their businesses beyond 5 years.

Success-oriented owners in the information technology industry, focus on making sure speed, flexibility, integrity, and innovation with the consideration of blue ocean strategies, which includes the employees' value factors. Managers should appreciate the employees; therefore, the organizational decision makers must use smart technology in

the organization (Yuliaty, 2017). Therefore, employees could factor into the success of a startup information technology company.

### **Information Technology Startup Impact**

Globally, information technology startup business owners receive recognition for contributions to economic stability, growth, and job creation (Sulayman, Mendes, Urquhart, Riaz, & Tempero, 2014). One impact of information technology startups is the potential for profitable growth and increased profits over a short time period. However, the impact of failed information technology startups is approximately 80% within the first year (Hyder & Lussier, 2016). From launch to success or failure, a number of stages that influence the progression of information technology startups are set in motion.

According to Bocken (2015), the stages that influence the progression of information technology startups are beginning (seed) stages, which is the startup inception. The next process is the growing stage of generating significant revenue adding infrastructure for further growth, and the mature stage transitioning into organizations that are establishing a good market share. Seed, also known as startup stage, is notable by entrepreneurs' own capital and that of family, friends, and government support (Bocken, 2015). A successful startup is a new company ownership that offers products and services capable of offering positive factors in the market, for a repeatable, profitable, and expandable business model, generating jobs, or transforming the way people perform (Santisteban & Mauricio, 2017). These factors could affect findings and understanding of how information technology startups owners apply new venture modeling strategies to sustain their business success beyond 5 years.



### **Aligning Information Technology Industry and Startup Dynamics**

The aligning of information technology startup business dynamics are important factors to this study. Reynolds and Yetton (2015), posit many studies that described how an increase in knowledge decreases overconfidence and makes individuals better at recognizing the limits of their knowledge. Overcoming the comfort of familiar situations is the key hurdle facing opportunity creation (Khaola & Ndovorwi, 2015). Davidsson (2015) posits opportunity emerges from pattern recognition, which could produce the type of Success Company owners, in the startup phase could use to sustain beyond 5 years or more. Applying the blue ocean theory to help create business opportunities in uncontested segments of markets. Wogwu and Hamilton, (2018) posited entrepreneurial education, information asymmetry, social networks, personality traits, and unique opportunities all influence the process of creation. Creative individuals and entrepreneurs continue to ignite innovation in the United States with information technology startup business owners accessing knowledge through the combination of existing business, academics, self-regulation, and capital resources to generate technology-based firms (Wali, Uduma, & Wright, 2016).

A defining factor of the information technology and startup dynamics alignment is that user acceptance of technology is essential to determine success (Tavana, DiCaprio, & Santos-Arteaga, 2018). Al-Qaysi, Mohamad-Nordin, and Al-Emran, (2018) argued that, user acceptance is particularly true when considering the introduction of new information technology. New venture modeling strategies would be a component in achieving this user acceptance. Gaining user acceptance of a new information

technology is an essential factor for startup owners, since business strategies for sustainability concepts could lead to market advantage. Blue ocean theory could apply to help startup information technology business owners generate strategies for lasting success (Kallio, Johnson, & Kangasniemi, 2016). In the present study, generating strategies for lasting success could include information technology startups successfully sustaining beyond the first 5 years.

### **Discussing the Topic in Relevance to the Theory**

The new millennium includes a time where globalization and advancement in technology, transportation, and communication resulted in the spread of business ideas, knowledge, and information (Warnecke, 2017). Information technology owners caused the reconfiguration and disturbance of business models in the conventional manner within the past few years. In particular, Khan et al., (2017) posit that the Internet includes a convenient and less expensive way of interaction of consumers and businesses. The owners of businesses must realize the need to conform to the fast-moving changes information technology could bring. The Internet business owners made the road of unrestricted communication for its users accessible for multi-person settings to share experiences that track negative or positive results (Khan, et al., 2017). The use of new strategic business protocols in response to the competitive market because of information technology brought products and services in accordance to the changes (Wogwu & Hamilton, 2018). Smart watches, medical bots, smartphones, exercise trackers worn on the wrist, online networks including Instagram, and rideshare services (Uber), lead to the expansion and innovation of new products and services. The expansion of technology

business owners caused new thought processes in organizational employees pertaining to strategic decisions and venture modeling for sustainability. The new thought processes in organizational employees and their innovative contributions to their organizations could result in a business owner's ability to diverge from competitors. Kim and Mauborgne (2015) stated that one characteristic of good strategy is diverging from competitors. Diverging from competitors could help some information technology startup owners who lack new venture modeling strategies to sustain their businesses beyond 5 years.

The life of organizations is dependent on the value owners put on supply and demand, which includes innovation of information technology (Macznik, Ribeiro, & Baxter, 2015). Leaders of entrepreneurial start-up organizations tend to heavily multi-task, as these owners are in many aspects of a business (Sharafizad & Coetzer, 2016). If a company owner is not mindful of new innovative and business-changing technology, competitors using the blue ocean theory could elevate above the company. Blue ocean theory can apply to market space, thus creating market segments or new markets where no competition exists (Wogwu & Hamilton, 2018).

New venture modeling strategies in the information technology startup segment is subject to herd behavior in the use of information technology (Lee, 2018). Herd behavior in the use of information technology is a phenomenon in which a person follows the behavior of other people in relations to technology adoption and does not take into account their own information or knowledge. Kim and Mauborgne (2015) described the behavior of red ocean is intense competition and that the atmosphere becomes combative.

The blue ocean strategy is a design that counters such actions by creating business in uncontested markets (Wogwu & Hamilton, 2018).

According to Swapana and Padmavathy (2017), the attributes of blue ocean theory are (a) social needs; (b) convenience, (c) brand name, (d) price, (e) product features, and (f) social influence play a vital role in affecting dependency on smartphones. These attributes, social influence, and brand name affect students' dependency on smartphones (Suki, 2013). The capabilities of consumers to gather information affect the technological innovation, market demand, and the evolution of technology dynamics (Giones & Brem, 2017). Littlechild (2018), indicated, to reduce innovation risk, a supply chain manager must seek the feasible innovation strategies to match ecological niche-matching degree and should avoid the hazardous nature of pure competition that affects the innovation output. The blue ocean strategy of creating uncontested markets and making competition irrelevant could avoid pure competition, which, could help some information technology startup owners who lack new venture modeling strategies sustain business beyond 5 years. Pure competition may not align with the blue ocean theory because entrepreneurs use this method to seek new ventures that are unique and not in direct competition with any other business.

E-commerce is the business model for business-to-consumers and business-to-business operations that are effective and profitable as consumers obtain products and services (Leischnig, Ivens, & Kammerlander, 2017). Entrepreneurs assume the market values are not constant but are merely products of the minds that are subject to change when applying a new perspective in thinking (Kim & Mauborgne, 2015). Applying new

perspectives in thinking when creating new venture modeling could help information technology startup business owners sustain their businesses beyond 5 years.

Organization leaders can redefine market space and achieve differentiation and low cost (Kim & Mauborgne, 2015).

Blue ocean theory in the 20<sup>th</sup> century included decision makers from the automobile manufacturers from Ford Motor Company, Xerox in the copier industry, and McDonald's in the fast food industry. These decision makers created a mass market for their industry. Turning a technology innovation into a value innovation is one the factors in the blue ocean theory. In the case of Ampex owners, in the 1950's, created a video recording technology, and then in the 1980's the owners of Sony and JVC adopted the blue ocean concept to a mass market, which made products affordable to consumers (Kim & Mauborgne, 2015). New venture modeling strategies to sustain information technology startup owners' businesses beyond 5 years could benefit from creating a mass market for their products and services.

A successful blue ocean process consists of the right to grow approach. The right to grow approach consists of choosing one offering; apply the blue ocean approach, resulting in other initiatives within a portfolio (Kim & Mauborgne, 2015). Red oceans represent all the industries that currently exist as knowledgeable market space where industry boundaries are accepted, and the rules of the strategy are to outperform rivals, achieve differentiation and competitive advantage to survive (Webb, 2015). Webb, (2015) posits, inevitably, as the market becomes more crowded, opportunities for growth and increasing profits reduce, and firms need to become more innovative. A red ocean

strategy is a business strategy based on competition (Webb, 2015). The bases of blue ocean strategy are uncontested markets, which could help some information technology startup owners who lack new venture modeling strategies to sustain their businesses beyond 5 years.

In the quest for blue ocean theory success, expanding partnerships to deepen innovation capabilities will speed the discovery of new technologies and new business models (Loebbecke & Picot, 2015). According to Loebbecke and Picot, (2015) CEOs, in nearly every industry, learned the need for customers, partners, and employees to collaborate moving further, faster in an era of runaway innovation. In one year, the number of CEOs determined to open up their organizations increased an astounding 27% (Loebbecke & Picot, 2015). Deepened partnerships and collaboration between employees, customers, and partners to speed the discovery of innovation could help information technology startup owners who lack new venture modeling strategies sustain their businesses beyond 5 years.

CEOs are pushing the boundaries of their organizations and opening up to empower collaboration among individuals and moving away from command-and-control hierarchies (Loebbecke & Picot, 2015). In addition, the owners are allowing their employees to have access to products, which could lead to satisfied internal customers. Satisfied internal customers could convey positivity, creativity, and innovation to the company by sharing their talent, ideas, and blue ocean strategies and thereby extending the results to serve the external customers. Loebbecke and Picot (2015) referred to internal customers as taking action to embrace disruption or moving outside of

boundaries of the organizations. Bringing people together from different industries, backgrounds, regions, and even generations could prove essential to predict and respond to new competitive threats.

Hackmann and Maedche (2018) posit, in highly dynamic industries, business processes include exploitation, for example, activities that are associated with an increase in productivity through automation, standardization, integrated architectures, and the usage of existing information technology resources. Hackmann and Maedche (2018) indicated, as a complementary capability, exploration is necessary, for example, the ability to implement new, and innovative information technology resources. Flexibly implementing new and innovative information technology resources are essential to blue ocean theory implications within an organization for making competition irrelevant (Hackmann & Maedche, 2018). To make competition irrelevant, college leaders are redesigning MBA programs to provide a blue ocean strategy to curb the onslaught of automation, robotics, and AI developments that could replace the white-collar jobs students learn (McKinley, Houke, Kizer, & Raynor, 2017). In the technology sector, a redesign of some business models could help information technology startup owners who lack new venture modeling strategies sustain their businesses beyond 5 years.

The issue of robotics in place of human jobs aligns with a major change in the workplace and higher learning institutional leaders must develop strategies that are first to market to avoid disruption from imitators (Wang & Baker, 2015). Davidsson, Recker, and Von Briel (2018) indicated digital technologist serve as external enablers of new venture creation in the information technology hardware sector by allowing the

entrepreneurs to create market offerings, which transcend traditional industry and market boundaries. The process emerges by developing advancements around existing business model innovation. This method could appear as a means to apply blue ocean theory in new venture creation of information technology hardware. Developing advancements around existing business models could result in new venture modeling strategies that help information technology startup business owners sustain their businesses beyond 5 years.

The application of blue ocean theory in creating business models could keep existing firms ahead of rapidly changing business landscapes with variations in the business model and innovation tools (Kim & Mauborgne, 2015). Ebel, Bretschneider, and Leimeister (2016) found that existing tools for business model innovation lack alignment to the fullest capacity because of the lack of full tool support. Ebel, Bretschneider, and Leimeister (2016) analyzed existing business model designs and created new business models to help tech giant Systems, Applications and Products in Data Processing (SAP), a German-based European multi-national software corporation that makes enterprise software to manage business operations and customer relations. Developing new business models could result in new venture modeling strategies that help information technology startup business owners sustain their businesses beyond 5 years.

The new system by Ebel, Bretschneider, and Leimeister, (2016) is a virtual collaboration, online knowledge collaboration, and business model innovation, which include a set of tools that did not exist at the time of their research. The information technology tool for development of new business models is an example of how owners



could use the blue ocean theory and the design tool to build businesses as a model of innovation. Building businesses as a model of innovation could present leaps of value to startups.

Startup owners that use new product development in information technology is dependent on managers. According to Kawakami, Barczak, and Durmusoglu (2015), an executive level champion for information technology is a key influencer in facilitating information technology usage and replacement, and likely can help generate awareness of and support for greater information technology investments so the firm can create information technology capabilities for effective new product development. Small business owners of startups are those likely to fit in this category as a reference to this study.

Agnihotri (2015) provided an analysis of the applications presented in blue ocean theory. Agnihotri then explored how blue ocean theory applies in emerging markets. Agnihotri made propositions concerning the blue ocean theory and its applications through radical innovation, disruptive innovation, frugal innovation, and differentiation of strategy concerning the value of innovation. Agnihotri furthers the use of the blue ocean theory by stating the blue ocean strategy canvas applies to all types of innovation. Agnihotri (2015) explored how the theory is a better source of profitability, which is a key factor for new venture modeling of information technology startups that aspire to sustain beyond the first 5 years of business.

Since blue ocean strategies occur at various points of an entrepreneurial process, practitioners and scholars can capitalize on a deep dive of the blue ocean theory (Kim &

Mauborgne, 2015). Agnihotri, (2015), Webb, (2015), Loebbecke and Picot (2015), and Heckman and Maedche (2018) provided descriptions of blue ocean theory in research referring to information technology and new venture modeling in startups, which could help information technology startup business owners. Many of the information technology startup business owners lack new venture modeling strategies to sustain their businesses beyond 5 years, and the research referring to information technology in the blue ocean theory could help these business owners sustain business beyond 5 years.

In the study of how blue ocean theory applies to the creation of business model development tools Ebel, Bretschneider, and Leimeister (2016), expressed the need to stay ahead of the curve with the concept presented in the blue ocean theory. Agnihotri (2015), applied blue ocean theory to show that the concept ties with numerous business applications beyond the initial concept introduced by (Kim & Mauborgne, 2015). Applying blue ocean theory, Von Briel, Davidsson, and Recker (2018), posited that the use of new venture modeling strategies could significantly add value to create new uncontested segments in the information technology segment. Successful companies, Pinterest, Snapchat, and Twitter use new venture modeling strategies that new information technology companies can apply to sustain their businesses beyond 5 years.

### **Transition**

The objective of the study was to explore strategies information technology startups implement to sustain beyond 5 years. Section 1 included background, problem statement, purpose statement, and nature of the study. The end of Section 1 concluded with the literature review, and a summary literature review.

Section 2 includes an overview of the research. The overview includes identification of the participants, role of the researcher, sample population, and ethics pertaining to the study. A discussion of research methods and the design of the study occurs in section two. In addition, Section 2 includes data collection procedures, research methods, and the data analysis procedures. Section 3 includes the presentation of findings, application to professional practice, implications for social change, and recommendations for action and future research.

## Section 2: The Project

Section 2 is a presentation of the elements of the project. The elements include the purpose of the study, the role of the researcher, the research method, the research design, and the reasons that support the choice of the research method and research design. A discussion in support of the population and sampling follows, then the ethical research, data collection, data collection techniques, data organization techniques, data analysis, a reliability and validity discourse, and then transition and summary conclusion.

### **Purpose Statement**

The purpose of this qualitative multiple case study was to explore new venture modeling strategies that some information technology startup owners use to sustain their businesses beyond 5 years. The targeted population consisted of three owners from different information technology startups in California who have venture modeling strategies that enabled them to sustain their businesses for more than 5 years. Findings from the research may contribute to social change by identifying successful venture modeling strategies information technology startup owners can use to sustain their businesses. These findings from the research could enable startup owners to extend social responsiveness such as educational and empowerment initiatives to individuals in financially depressed areas where multiple information technology company owners conduct business.

### **Role of the Researcher**

In collecting study data, I used semistructured interviews presented to owners of information technology companies in California. According to Elfarmawi (2019),

researchers who are familiar with research approaches, organizational research, and institutional policies gain advantage and access to interviewing research participants. The process used by the Institutional Review Board (IRB) provided the safeguards of the subject participants in the research study are not harmed (Kirkpatrick, 2015). Upon receiving IRB approval, I used the Chamber of Commerce website to identify information technology startup business owners for this qualitative multiple case study. I contacted business leaders by email invitation describing the intent of the study to prospective small information technology business owners in California to conduct phone interviews for this study. The participants received assurance that their responses would remain confidential. In order to preserve a record reflecting the ethical procedures used to protect the rights of the enlisted participants, during the phone interviews, each received a letter of invitation. In addition to the letter of invitation, participants received an informed consent form at the time of the interview. Each participant signed a document informing that they can opt-out at any time without explanation. In accordance with the United States Department of Health and Human Services (2016), I respected the interviewees by curtailing risks through submitting and adhering to consent forms. Maintaining the protocol of *The Belmont Report* is a primary objective in guaranteeing ethical behavior during the research process (Miracle, 2016). Remaining impartial and following the rules by being unbiased and bracketing assumptions is important to data collection (Kallio, Johnson, & Kangasniemi, 2016). In addition, as a responsible researcher, I informed each participant of my experiences and qualifications regarding the topic. Throughout the interviewing process, I duly listened and recorded participants'

responses with bracketed notes devoid of my own personal biases. Also, I asked clarification questions or addressed any participant questions regarding a given interview question according to interview protocol to avoid bias or leading the conversation.

The use of an interview protocol is an assurance that participants stay informed throughout the interview process and to guide the researcher. Jacob and Furgerson (2012) stated that an interview protocol is a guide to help qualitative researchers through the interview process. My rationale in conducting these interviews was to increase the knowledge base of successful strategies used by information technology startup owners. I used an interview protocol as a guide throughout the process to guarantee reliability during the interviews. Interview protocols are standards and guides for the qualitative research during the interview process (Dikko, 2016). Preparing an interview protocol in advance, I included the interview process and written research question (Yin, 2017).

### **Participants**

Researchers using a purposeful sampling criterion for participant selection improves the in-depth understanding as well as the breadth of the phenomenon being studied (Booth, 2016). The following criteria were for the participants of this study: (a) information technology business owner, (b) demonstrates criteria for selecting participants and interview setting are appropriate to the study, (c) implemented strategies that resulted in successful business growth, and (d) 5 years business ownership. The population group of participants for this study included technology startup owners over 18 years old in California. These business owners had at least 5 years of business managing with strategies that enabled them to thrive in their segment. The business

owners reflected the information technology population in California who sustained their businesses over 5 years. The rationale of choosing individuals with specific criteria was to attain valuable information from their unique experiences (Li, Liu, Pan, & Zhou, 2017). Wallace and Sheldon (2015) indicated that through telephone communication and in-person encounters, the researchers' purpose for making contact is to gain the business owners' participation in the research study. I called the business owners' place of business to make contact for the research study.

Maintaining a positive professional relationship with the interviewees requires a phone call to their respective places of business. The intent of making contact with a participant's place of business is to explain whom the interviewer is, the purpose of the interview, and the ethical guidelines regarding the interview (Houghton, Casey, Shaw, & Murphy, 2013). During the phone call, I introduced myself to explain my position, what I was seeking from the interviewees and my adherence to ethical precepts before, during, and after the interviews. I followed through with emailing consent forms for interviewees to sign prior to conducting phone interviews. Upon receipt of the signed consent forms, I advised interviewees of the scheduled time of the phone interviews for this research study.

### **Research Method and Design**

This study was a qualitative multiple case study of new venture modeling strategies used by information technology companies located in California to sustain their businesses beyond 5 years. I conducted semistructured phone interviews of business owners to answer the research question and explore successful venture modeling

strategies for sustainability beyond 5 years. I used a qualitative research method and a multiple case study design to explore the research question. Researchers use the qualitative approach to describe, explain, explore, and learn further about a current phenomenon from the participant's personal experiences (Marshall & Rossman, 2016). The qualitative research method allowed me to explore successful venture modeling strategies used for sustainability by information technology company owners. Yin (2017) referred to case study as an empirical look at a specific case such as a group, person, or organization in learning about an issue or phenomenon to facilitate further understanding and knowledge. I used a multiple case study design since I researched more than one participant and organization from the information technology sector in exploring successful venture modeling strategies as well as any similarities and contrasts between the cases.

### **Research Method**

Research methods include three types: qualitative, quantitative, and mixed method. In the present study, the research method I used was qualitative. Qualitative research is a method that a researcher can use to explore the study in a real-world environment (Marshall & Rossman, 2016). Qualitative research is a method that a researcher can use to help find out in-depth experiences of participants who share details about the strategies used to succeed (Yin, 2017). Researchers can use qualitative research in some cases to understand the patterns and behaviors of research participants (Percy, Kostere, & Kostere, 2015). I chose to incorporate the qualitative research method



to obtain strategies of participants who manage information technology businesses for more than 5 years successfully.

A quantitative method of research generates detailed data about a subject and examine statistical variables' relationships and differences (Palinkas et al., 2015). Using a quantitative research method narrows the understanding of the study (Van Griensen, Moore, & Hall, 2014). Quantitative research includes statistical data to determine relationships between variables (Park & Park, 2016). I elected not to use a quantitative study, because the study did not include variable relationships and numerical data.

Mixed method research includes qualitative and quantitative methods (Ivankora & Wingo, 2018). An understanding of each method within the mixed method is available and can result in a large amount of data, which reflects each method used (Palinkas et al., 2015). A mixed method is useful when converged data provides perspective and new meaning (Varho & Tapio, 2013). I elected not to use a mixed method for this study, as numerical data was not included in this study.

### **Research Design**

This study included a multiple case study design. The difference between single and multiple case study design is the number of cases studied. A single case study is a study with one group or one business, whereas a multiple case study involves more than one participant such as more than one group or business (Mills, Harrison, Franklin, & Birks, 2017). Using a case study design could provide insights on issues, realities, and growth directions in an understandable manner (Varsei & Polakovsky, 2017). Also, researchers use the case study design to plan the collection, organization, and analysis of

the information relevant to the research question (Aczel, 2015). Using the case study design, I discovered and brought understanding through interviews and research of shared strategies of business owners focusing on those information technology startups with success over 5 years. A multiple case study design was the best approach for this doctoral research because I was studying more than one business owner, focusing on business model strategies specific to my research question.

The other study designs I considered were ethnographic and phenomenological. The ethnographic design includes a cultural grouping of individuals sharing some activities in time (Elfarmawi, 2019). Researchers utilize ethnography as a design in exploring and describing a group's overall culture, beliefs, values, and knowledge in their specific environments (Van Maanen, 2015). Researchers who use phenomenological design explore the individual participants' experience of the phenomenon (Alase, 2017). The objective of researchers who use phenomenological design is to gain a greater understanding of the participant's lived experiences through the mind of the participant while interpreting these human experiences in the data analysis (Honan & Bright, 2016). My study was an exploration of the successful strategies used by information technology business owners to sustain the business beyond 5 years. Hence, understanding the cultures of these organizations or the lived experiences of the selected business owners was not necessary. Therefore, I chose not to utilize ethnography or phenomenological design for my study.

The accomplishment of data saturation is essential in qualitative research and occurs once no new themes or information emerge from the data (Nelson, 2017). The

researcher can use a case study design with tools such as semistructured interviews for data collection of subjects. Tools and techniques available through the case study design include physical artifacts, observations, participant-observation, documentation, archival records, and interviews. Case study designs include data collection from a minimum of two sources (Yin, 2017), and the sample size for this study included a minimum of three participants. This sample size should be sufficient in achieving data saturation based on the selection of the business owner participants and knowledge to address the research study question (Moser & Korstjens, 2018). To ensure data saturation in my study, I collected data utilizing semi-structured interviews, member checking during coding and interview follow-up, along with additional phone interviews when necessary, until no new themes or information arose.

### **Population and Sampling**

The population group for this study was comprised of information technology business owners who operate in California. The business owners had at least 5 years of business experience with strategies that enable them to thrive in their segment. The business owners reflected the information technology population in California who sustained their businesses over 5 years. The process of selecting business owners who participated in this study included purposeful sampling. Sanusi, Olaleye, and Atjonen (2017) posits that the factor of purposeful sampling is choosing participants who qualify through clearly defined criteria. In purposeful sampling, the chosen participants are knowledgeable on the subject in order to provide valuable information to the study through their experiences and knowledge of the topic. In a purposeful sampling, I

intended to choose knowledgeable participants who possessed valuable insight into the study with strategies from experiences. Purposeful sampling gives access to those individuals with information in the respective field. I applied purposeful sampling to identify those participants with the strategies that are in accord with the purpose of this study. I also selected participants for this study who (a) had been in business since 2014, (b) established and sustained an information technology startup with a maximum of 500 employees, and (c) had a business located in California.

The number of participants included three information technology startup owners in California who possessed new venture modeling strategies to sustain their businesses beyond 5 years. Having utilized a purposeful sampling selection of the business owners for this study may have provided insight into the larger population of business owners in this segment of information technology business in California. I achieved data saturation by comparing themes and patterns from the research until no new pattern or themes developed. Marshall, Cardon, Poddar, and Fontenot (2013) noted that data saturation occurs when themes become repetitive and new information is not occurring. Interviews occurred over the phone with owners of information technology startup businesses until data saturation occurred. If needed, follow up interviews would have occurred until no new information derived from the interviews with the information technology startup business owners. Ragab and Arisha (2014) noted that data saturation occurs when new information adds little value to the themes or topics.

Fusch and Ness (2015) confirmed that data saturation occurs when no new themes or new information emerges. I reached data saturation through phone interviews with

owners of information technology startup businesses. Boddy (2016) posited that data saturation occurrence can range between one sample and 12 samples. The selection of interview phone calls in California for the participants ensured comfort and convenience. I proposed a place of privacy within the business owners' company locations for the interview phone calls for establishing a comfortable flow for the participants to share their experiences. Interview protocols are standards and guides for qualitative research during the interview process (Dikko, 2016).

### **Ethical Research**

In the process of the research, researchers must maintain the confidentiality and general welfare of the participants (Wallace & Sheldon, 2015). All participants were advised that there was no pressure to be interviewed and that they were free to discontinue the interview without explanation. I built rapport and understanding in answering any questions or concerns from potential participants, informed them of the voluntary nature of the study, reiterated an emphasis on confidentiality as a top priority, and that they could have withdrawn from the study at any given time with no questions or consequences. There were no offers of money or anything of monetary value made to the interviewees under any circumstances.

To maintain participant confidentiality, the research data derived from the interviews will remain in a safety deposit box for a period of 5 years. Within the consent to participate, the document included my name as the researcher, cellphone number, and email along with the same information for my Walden University supervisor. The document also included the purpose of the study, the researcher, the confidentiality of the

information, and the interviewees' right to withdraw. Saunders et al., (2013) indicated the interviewee's right to withdraw by notification, phone, or email, before, during, or after the interview from the study can occur at any time. I informed participants that the interviews would last no more than 30-45 minutes in length and the consent form included this information for review. Maintaining the confidentiality of the participants required identifying the participants as P1, P2, and P3. The Walden IRB approved number for this doctoral study was 04-17-20-0532560.

### **Data Collection Instruments**

I served as the primary data collector. The qualitative research study included the researcher serving as the instrument for data gathering and attempts to capture the meaning of the study in the participants' words (Marshall & Rossman, 2016). Data collection is a method that researchers utilize to get the information from interviewees pertaining to the research. The sources used for data collection included archival records, participant observations, physical artifacts, and documentation (Yin, 2017). According to Lewis (2015), the unbiased attribute of the qualitative researcher is setting aside personal views of the phenomenon and focusing only on the views of the participants in their own words. The data collection process by a qualitative interview allows researchers to collect, explore, and reconfigure events from the perspectives of participants that an individual could not obtain from a quantitative research method (Silverman, 2015). The recording of the interviews occurred on the voice recorder feature of a cellphone. Prior to the commencement of the interviews, each participant signed the informed consent form. Upon IRB approval, collection of the interview data was in accordance to the interview

protocol. Providing abridged interview protocol (Appendix A) was to help with structure, consistent planning, and process of research (Arsel, 2017). Interviews with participants did not exceed 30-45 minutes. Through an agreed upon schedule, the interviews were conducted with participants on specific days, dates, times, and places most convenient for participants. The participants reviewed their responses for clarification as a part of the member checking process.

### **Data Collection Technique**

Prior to beginning interviews, the interview process was explained to participants as indicated in the informed consent form and confirmed that every participant understood their rights to participate in the research. The participants received an explanation that the interview would be recorded and transcripts would remain available for review for accuracy. Participants' identities remained confidential, as this, along with a convenient location for the participant provided a comfortable environment to share experiences in a favorable environment (Peterson, 2014). Interviewing participants occurred until data saturation. Data saturation occurred when the data became redundant. Interviews were by audio recording using my phone application, then the data was transcribed, and afterwards a member checking summary was sent to each participant following each interview. Once all member checking received confirmation and any additional new information was gathered, then data analysis occurred using NVivo software as well as proper and confidential data organization. The advantage of the collection technique was that the findings from the gathered data with open-ended questions could prove useful as tools to identify new venture modeling strategies for

information technology startups to operate beyond the first 5 years. The intent was to make the participants feel comfortable during the data collection process (Arsel, 2017). The disadvantage of this technique was that the participants may not provide accurate information, and time constraints could make information scarce (Topkaya, 2015).

### **Data Organization Technique**

Data organization technique includes the systems used for keeping track of data, emerging understandings of research logs, reflective journals, and cataloging/labeling systems. I organized the interview data of this study by storage and the information from each participant received coding. The participants' confidentiality was paramount; therefore, I stored all files and transcripts on a second secured, dedicated memory card. A researcher has a duty to secure the privacy and confidentiality of the participants of a study (Mealer & Jones, 2014). Participants are concerned with their anonymity when interviewed for a study (Namegayo-Funa, Rimando, & Brace, 2014). Coding occurred for all participants as Participant 1, Participant 2, and Participant 3, further referred to as P1, P2, and P3 on the dedicated memory card. This code system is in accord with the system used in coding to protect names (Mozaffari, Peyrovi, & Nayeri, 2015). The secured memory card and the electronic recording device remains stored in a safety deposit box in a remote bank location for 5 years, after which time, destruction will occur on all devices. This data storage and data organization process are in accordance with the storage process described in Leung (2015) concerning storing and locking the data away in a safe location.



### **Data Analysis**

Qualitative data analysis involves the researcher labeling, categorizing, and thematically grouping data from cases, participants' statements, and document reviews (Yin, 2017). Immediately following each interview, I transcribed the responses from the semistructured interviews, compared the audio recordings with my field notes, and proceeded to coding, categorization, and identification of major themes in the data. In addition, I assigned each participant an identifier such as P1, P2, and P3 to protect the participants' identities. Yin (2017) recommended the data analysis techniques entail searching every meaning by analyzing and reducing statements to themes. In addition, triangulation is a recommended practice for analyzing multiple types of data in research (Natow, 2019; Migala, & Flick, 2019). In addition to using the semistructured interviews during data collection, I also reviewed public company documents such as sales sheets, participants' websites, and other pertinent company information from global databases related to sustainability. I then identified major themes from each participant's interviews and supporting company data focusing on new venture modeling strategies and correlated sustainability in the exploration of the research question, the underlying conceptual framework of blue ocean strategy, and my literature review.

I used triangulation in my data analysis of the multiple types of collected data. According to Henry (2015), researchers use triangulation as a method to analyze multiple data sources to gain richer perspectives from the study. Also, researchers use triangulation practices to strengthen the credibility of participants' responses along with enhancing rigor of the research (Carnevale, 2016). I applied triangulation during data

analysis of the semi-structured interviews, audio transcriptions, document reviews, and my field notes to improve the rigor of my study and support of the findings.

During data analysis, researchers use data analysis software such as Atlas Ti, NVivo, and MAXQDA, to aid in coding, categorization, and finalizing the study's findings (Oswald, 2019). After comparing various software analysis programs, including Atlas Ti and NVivo, I selected NVivo as the data software analysis for my study. NVivo seemed to have a more user-friendly interface, and I used NVivo to categorize the data. Researchers choose NVivo for the coding query aspect in expanding the scope of data analysis, clarifying themes, and helping readers visualize the study's results (Paulus, Woods, Atkins, & Macklin, 2017). I used NVivo 12 to code and codify the data into themes, and then, identify patterns between and in the categories. Also, throughout the data analysis process, I consistently analyzed the data through the lens of blue ocean strategy and the major themes identified in the literature review. Researchers use the data themes to fit into the overall study's purpose, answering the research question, and build a valid argument for such themes by referring back to the literature review (Nowell, Norris, White, & Moules, 2017). I used the themes and codes along with current, emerging findings to substantiate my study's findings while relating the results to my conceptual framework, literature review, and the overarching research question.

### **Reliability and Validity**

The analogous criteria for qualitative studies are credibility, transferability, dependability, and confirmability. The criteria are not measurable and align with qualitative methods such as member checking. As recommended by Yin, (2017), I

provided a set of descriptive reliability and validity components of the study to establish credibility in the data. The use of multiple sources and the data from these sources helped establish the reliability of the study (Mai, 2017). Additionally, as recommended by Saunders, et al., (2018), triangulation was used to confirm results.

### **Reliability**

The development of coded patterns is key to establishing reliability in qualitative research (Marshall and Rossman, 2014). Reliability refers to how the researcher reaches the same result if repeated through consistency. Processes of collecting the data into compartments and sub-compartments, then reconfiguring the data from the conceptual framework, member checking dependability into the themes (Trainor & Grane, 2014). According to Houghton et al., (2013), consistent execution of the procedures used by a researcher can establish qualitative reliability. The researcher should pose to every participant the questions asked in like manner during each interview. The researcher must use numerous sources in order to increase the validity and reliability of the data in the research (Mai, 2017).

### **Validity**

Validity and reliability are central tenets of ensuring good quality research. Saunders et al. (2018) posits validity is a useful measurement of technique. Validity can occur using member-checking techniques to establish trustworthiness and credibility. In addition, confirmability, dependability, credibility, and transferability are standards to maintain trust (Saunders et al., 2018). These qualities are essential for the researcher to establish validity. According to Mason (2017), an adequate reliability strategy

contributes to consistency, I maintained the same process while collecting data from every participant in order to establish dependability and diminish possible errors. After the completion of interviews, the researcher must establish that the information from the interviews is accurate (Malterud, Siersma, & Guassora, 2016).

Methodological triangulation is a tool used as an additional method beyond the interviews and include document review, observations, audio transcriptions, and field notes to name some items. Through interviews, I validated the study through triangulation, validation, and credibility of the outcomes. According to Leung (2015), reviewing the collected data to establish whether the findings are credible or transferable is how to establish validity (Jordan, 2018). With methodological triangulation, I reviewed the data collected and explored all aspects of the interview and process to produce research with noteworthy validity. The validation process of the study included one-on-one interviews with each participant. The duration of the interviews did not exceed 60 minutes in length of time. During the interview, I encoded the impact of the participants' experiences in addition to collecting data. After the data collection process, the analysis of the data from the interviews as well as a member could provide validation of the study through confirmability as standards to maintain trust (Saunders et al., 2018).

According to Palao, Hastie, Cruz, and Ortega (2015), a follow up interview could occur adding validity of the study and create ideas for future research as transferability factors forwarded for the furtherance of other research in the area of study (Saunders et al., 2018). Confirmability will occur by ensuring that the data is accurate and not bias by following the protocol of the study (Boddy, 2016). I interviewed three participants to

satisfy data saturation. I confirmed data saturation. Cavalcanti (2017) indicated that saturation occurs once the data becomes repetitive and no new data emerges. In the event data saturation did not occur, I would have followed up with participants to confirm no additional information to reach data saturation. The three participants' responses during phone interviews received validation using methodological triangulation, member checking, and review of transcript, if it was necessary, to analyze the data to establish credibility of the study (Stage & Manning, 2015).

### **Transition and Summary**

In Section 2, I expressed the overview and purpose of writing my research study, which entailed the role of the researcher, the participants, the research methodology, the population and sampling, the ethical research, data collection tools, and the process of generating data. In addition, an explanation explaining the steps to assure reliability and validity throughout the study occurred. In Section 3, I will present the purpose statement and the research question. The following in the study will include the presentation of findings. Section 3 will include the application to professional practice, implication for social change, recommendations for action, and recommendations for further research, my reflections, and conclusion.

### Section 3: Application to Professional Practice and Implications for Change

#### **Introduction**

The purpose of this qualitative multiple case study was to explore the new venture model strategies of information technology business startups used to sustain business beyond 5 years. The study included interviews and analysis from the data of three participants. The participants provided information to determine the effectiveness of the blue ocean strategy. All data derived from the questions used in the interviews from the participants in this study pertained to the use of blue ocean strategy to sustain their businesses over 5 years. The outcomes of this study revealed the participants agreed during the interviews that the new venture modeling and blue ocean strategies were useful and effective to sustain business beyond 5 years. Section 3 includes discussions pertaining to the outcomes of the research. In addition, Section 3 includes the recommendations and implications of this study, recommendations for further actions, reflections, and conclusion of the study.

#### **Presentation of the Findings**

The primary research question for this study was what new venture modeling strategies information technology startup owners use to sustain their businesses beyond 5 years. Interviews were conducted with three participants from three companies using semistructured interviews. Interviews with the participants of the study were recorded on my cellphone. Notes were taken from the interviews, which were included as additional notes in NVivo 12 for the data analysis portion of this study. One of the participants serves as founder of an e-learning platform, the second participant heads an information

technology sales compensation company, and the third participant is the head of a venture startup that creates tools for analytics of information technology companies. All of the participants conveyed that the success in their businesses started with sales which led to new venture modeling strategies. The three participants answered eight questions relating to new venture modeling strategies to help a business sustain beyond 5 years. All participants are information technology business startup owners with success using new venture modeling strategies to sustain their businesses beyond 5 years. Every participant used blue ocean strategy to make the competition irrelevant during the first 5 years of operation.

The conceptual framework for this study was the blue ocean theory. Kim and Mauborgne introduced the blue ocean theory in 2005. Kim and Mauborgne (2015) indicated that the blue ocean theory has been the basis for many new venture modeling strategies. Blue ocean theory has been used as a model for information technology startup ventures to sustain beyond the 5 years of operation (Kim & Mauborgne, 2015). Davidsson, Recker, and Von Briel (2018) indicated that digital technologists serve as external enablers of new venture creation in the information technology hardware sector by allowing the entrepreneurs to create market offerings that transcend traditional industry and market boundaries. Applying blue ocean theory, Von Briel, Davidsson, and Recker (2018), concluded that the use of new venture modeling strategies could significantly add value to create new uncontested markets in the information technology segment. Respondents' answers and the themes derived from the analysis of the data are in alignment with the new venture modeling strategies found in the literature and the blue

ocean framework. Four themes emerged from the data collected from the semi-structured interviews, public information of their companies, and notes I compiled from the interview process. The themes were: (a) disruptive technology (b) value/cost tradeoff (c) agility in technology and (d) data analytics.

### **Theme 1: Disruptive Technology**

Participants P1, P2, and P3 reported that differentiating their businesses in the market involved disruptive techniques. P1 stated that the disruptive selling model for their information technology business entailed buying licenses for sales compensation platforms at a wholesale rate and only buying as much as needed. In the case of P2, as an independent consulting shop that implements Callidus software for companies, being first to market with new feature functionalities that Callidus releases on the platform is the key disruptive selling point used to make the competition irrelevant. P3 advised that in the first 5 years of operation, their information technology business for e-learning “would do a bunch of models, single port development, single development to a level to say ‘here is what you’re getting’ but the major development and major expense was done once a purchase order was in place”. In this way, P3 would disrupt with new and innovative models, but would secure revenue before expense on the finished technology for their customers was completed. Business owners in the cases presented here have differentiated their information technology startup businesses through enhanced products, product or service customization, and competitive pricing.

When answering the interview question concerning the use of new venture modeling strategies to address market competition, P1 related that changing the paradigm



to make value management was key, instead of reliance on project management. P1 had noticed that the competitors rely on managing the tasks assigned to people on a given project. The change P1 implemented in their organization was based on not “looking at projects and processes, we look at the value each step brings to the company and thereby increasing the value of the project to the company as we go deeper into the project”.

P2 expressed their unique approach to the question of using new venture modeling strategies to address market competition: “so as an independent person, versus the big consulting companies, I am able to come in more nimble and at a lower price point than the big guys while having the same industry knowledge and years of expertise”. P2 states that the venture model strategy of being a small business and as knowledgeable of the business segment allows for sustaining business by performing and executing services that are asked of them to their clients’ satisfaction.

P3 asserted that the new venture modeling strategies used is continually applying the most cutting-edge technologies allowing their go-to-market model to stay ahead of current technologies. P1 realized that it is important to stay ahead of the competition by “seeing what is coming in before coming in and implementing that before the other people do”. P3 said that this new venture modeling approach allowed the organization to stay ahead of the competition. P3 stated that, “we started implementing these big data technologies into spaces that people did not even anticipate and in fact, they’re not even coming yet to the mainstream”. In this way, P3 has made the competition irrelevant as explained in blue ocean strategy. The responses from all of the participants in reference to new venture modeling strategies to address market competition were based on

innovative, next level practices yet to be used by the competition. According to P1, the overall approach in new venture startups of any kind must be disruptive selling and disruptive technology. With this as a standard, P1 states, “So we have been very successful in adopting and implementing disruptive selling everyday”. Wogwu and Hamilton (2018) aligned with the participant when stating, “The use of new strategic business protocols in response to the competitive market because of information technology brought products and services in accordance to the changes”.

### **Theme 2: Value/Cost Tradeoff**

The recurring theme of value and cost regarding the new venture modeling strategies used by the participants were derived from the participants’ applying innovation to succeed and scale. When asked what new venture modeling strategies are most helpful to managing information technology startup businesses, the majority believed that implementing innovation early, the use of value-driven models, engagement, professionalism, and expertise are key. Each participant perceived the value of the applied new venture modeling strategies in a unique way for their respective businesses. P1 stated that

We changed our new venture modeling strategy so that things started with the view of getting results within the first 30 days or so. Every 20 days there is a new deliverable deck coming into the market, which gives some value or the other to the customer from the development team.

Customer relations with a results-driven initiative was a recurring measure used by the participants. P2 expressed the value/cost tradeoff as being “all about contacts,

connections, people you know. Because as you develop relationships and/or reputation towards your work ethics and capabilities, it will be easier to establish relationships and new lines of business”.

P1 incorporated a new venture modeling strategy that enabled the elimination of any competition by measuring the value of each step in completing a project for a customer. In this way, P1 used value management as opposed to what the competition used, which would be task management. By valuating each step of an information technology project for the customer, P1 increased the value of the project for the customer as the project progressed into the core milestones. In the process of value management for a customer, P1 eliminates the competition by increasing the project value at each step of the project for the customer.

P2 argues that coming in as an independent as opposed to big consulting companies, the price quote for services are lower and that's the value. P2 asserts that “network is key, and the execution of the work, establishing that body of work to show that you have the expertise and the abilities for the ask that is being made”. P2 explained that

The large consulting houses hire people with so-so knowledge and they are charging a boatload of money and they come in, do a piece of work and disappear. I would come in and create a relationship and follow through and complete an execution to ensure the projects were done on time, within budget, and in completeness.

Hence, creating a successful new venture modeling strategy that applies engagement, professionalism, and expertise.

P3 states about the cutting-edge systems utilized in the information technology offerings for their customers that, “they’ve seen the value of what you are doing because we implement innovation before people start seeing it”. P3 provides innovation that is ahead of its time, and with these technological offerings being so ahead of their time, such technology is the value offering. S3 utilizes these offerings and thus creates a value driven model for sustaining the information technology business beyond 5 years.

A brief description of cost, in reference to value/cost tradeoff was offered by P2 and P3 during the interviews. Value/cost tradeoff was more than information technology systems; time and how time factored in the approach participants applied to the growth of their information technology startups and how time factored into devising deliverables for their customers were key. P2 summarized the relevance of time as it applies to value/cost tradeoff in their information technology startup, “Am I willing to put in more time and my time will make me more successful or detriment the level of potential success while reducing some of the time dedicated to it”. By extension P2 realized that time is a value and the cost tradeoff of not applying the necessary amount of time to the new venture modeling strategy and the customer deliverables could be detrimental. P3 describes how taking the time to build proof of concept demos for their customers. It was realized through the interview that this painstaking task added value over the competition in the long run, “...we conduct proof of concept; giving people a demo – for what is the change going to be for them. As a result, they see the benefit firsthand, and they use the

try-before-you-buy model. So, you can try it out, then you can buy it”. Macznik, Ribeiro, and Baxter (2015) aligned with the participant stating, “the life of organizations is dependent on the value owners put on supply and demand, which includes innovation of information technology”. Review of the participants’ use of time and cost in the value/cost tradeoff factored in as an important strategy for the growth and sustainability of their respective information technology startups.

### **Theme 3: Agility in Technology**

Flexibly in implementing new and innovative information technology resources are essential to blue ocean theory implications within an organization for making competition irrelevant (Hackmann & Maedche, 2018). In the technology sector, a redesign of some business models could help information technology startup owners who lack new venture modeling strategies sustain their businesses beyond 5 years. Given the competitiveness of the information technology segment, the exploration of the participants’ actions and responses to an ever-evolving market was important. When the participants were asked to describe how they were able to stay agile in technology, all participants responded that the ability to bring new approaches and tools to the market before the competition allowed them to stay agile. In the study of how blue ocean theory applies to the creation of business model development tools Ebel, Bretschneider, and Leimeister (2016), expressed the need to stay ahead of the curve with the concept presented in the blue ocean theory. A defining factor of the information technology and startup dynamics alignment is that user acceptance of technology is essential to determine success (Tavana, DiCaprio, & Santos-Arteaga, 2018). Al-Qaysi, Mohamad-Nordin, and

Al-Emran, (2018) argued that, user acceptance is particularly true when considering the introduction of new information technology.

In answering the question of agility in technology and how it applies in the participants' information technology startup businesses, the responses varied; a shared common theme of differentiation existed from the competition. When asked what new venture modeling strategies are most helpful in successfully managing their information technology startup business, P3 stated,

Hiring resources who are trained in only one technology and then have to be ramped in other technologies would generally not work in that scenario. Hiring people who are multi-faceted who can do multiple things at the same time really helps and has helped us in our technology business.

According to P1, when asked what new venture modeling strategies are implemented to create untapped market space, P1 responded,

We have adopted and implemented various kinds of sales compensation systems pretty much not over again. The untapped sales compensation-driven analytics. This is something that was lacking in the space, we have built a product that fits the build right up front. We can do analytics anywhere, anytime, and process out-of-the-box which is near real time.

P1 said this about this process: "This gives us the flexibility to be nimble and go to market much faster with this innovation". According to P3, their information technology business is based on cutting-edge technology. P3 explains that it is imperative to take one step ahead of current technologies and see what is coming in advance of all other

businesses in the segment. Using agility, P3 states that implementing new technologies in areas the competition had not anticipated is key to keeping an edge in the market. In a capsule, P3 states that, “What we’re doing is integrating new technologies into business processes that not been heard of”. Hackmann and Maedche (2018) agree with the participant when they indicated, as a complementary capability, exploration is necessary, for example, the ability to implement new, and innovative information technology resources.

Agility in technology was viewed from a more interpersonal lens by P2 who viewed the theme as a matter of being current and knowledgeable, while exhibiting dedication, interpersonal skills, and the proven techniques to communicate with clients on all levels. This, according to P2, were key agility points used to negotiate the technical expertise through the executive briefing. Beyond the executive briefing, the performance of skills, industry knowledge, and years of expertise P2 possess are the same as those of the big consulting companies.

P2 was the smaller of all the independent information technology startup businesses interviewed, offered insight concerning the virtues of being independent and using value innovative strategies. P2 highlighted strategies that were advantageous in the information technology business startup segment as “The personal approach with the engagement with the customer, the level of professionalism, level of knowledge and expertise I bring to the table”. As an independent startup, P2 applies a new venture modeling strategy that is nimble and offers lower price points while delivering the same industry knowledge and expertise. Nimble, in this sense, refers to a level of independence

and agility to come to a customer and win them over without lots of formality and red tape.

Expansion of technology business owners caused new thought processes in organizational employees pertaining to strategic decisions and venture modeling for sustainability. New thought processes in organizational employees and their innovative contributions to their organizations could result in a business owner's ability to diverge from competitors. Kim and Mauborgne (2015) stated that one characteristic of good strategy is diverging from competitors. P3 expressed the agility when addressing key barriers by which their information technology business startup diverged from the competition as,

We split our organization into two parts, one part that is actually into the business of delivery. The other part is actively focused on education. The education arm of the company reaches out to the customers and gives them ideas of what we can innovate and what can be done – with no strings attached.

All participants applied agility in their information technology startup businesses in ways that are unique to their organizations to sustain over 5 years.

#### **Theme 4: Data Analytics**

The capabilities of consumers to gather information affect the technological innovation, market demand, and the evolution of technology dynamics (Giones & Brem, 2017). Sentiment analytics is one way that information technology startup businesses determine the direction to take with new venture modeling strategies. When asked what value innovative strategies have been used in their information technology startup



business, P3 stated that “What we’re doing is integrating new technologies into business processes that not been heard of. For example, we’re using big data technologies for revenue recognition”. Sentiment analytics is tracing patterns and changes in various human factor activities (Gelbard, Ramon, Carmeli, Bittmann, & Talyansky, 2018). P3 added that sentiment analytics “...helps you go to the market a lot more effectively”. Bringing people together from different industries, backgrounds, regions, and even generations could prove essential to predict and respond to new competitive threats. Owners of businesses must realize the need to conform to the fast-moving changes information technology could bring. Internet business owners made the road of unrestricted communication for its users accessible for multi-person settings to share experiences that track negative or positive results (Khan, et al., 2017). Concerning this use of sentiment analytics, P3 added,

Let’s take an example of a company on cloud computing, if the cloud computing company was going to host an event, they would like to know what the people would like to hear from the organization designed to help them.

Data analytics was a factor during the interview for P2 as it applies to the software implementation aspect of their information technology startup business. P2 stated that it is essential to

Stay current in the sales compensation analyst space as it deals with Callidus, attending trade conferences dedicated to those particular spaces, read published articles to understand current trends, and also understand any new feature functionality released on the Callidus platform.

Blue ocean strategies encompass the new venture modeling strategies that are used as tools that information technology business startups use to have a competitive advantage over the competition. Of the tools used, data analysis is a major factor for information technology business startups. P3 stated,

Take an example, sales compensation is a classic example, we started about doing near real time analytics in sales compensation. We started talking about using sentiment analytics to build go-to-market strategies. That's something which is a lot more unheard of until the last couple of months. So, we are ahead of the curve.

To develop data analysis from the customer base, P1 provided products and services for their customers on a trial basis in order to receive feedback in order to assess the best means to sell new technologies. P1 stated,

Sales compensation is a fairly mature process. Which means the people on the other side, the buyers are also mature in age, experience, and thinking. It is a little challenging for them to think out of the box. That is the core challenge that we are facing with New Age technology. A way to break that thought process is to first give them something that they can see and compare to what it was and what it is, out of the box.

This is how P1 dealt with barriers encountered in using new venture modeling strategies to manage their information technology startup.

### **Applications to Professional Practice**

Findings of the study could aid with strategies that information technology startup business owners use in to sustain beyond 5 years. Applying the new venture modeling

strategies to think critically, implement innovation, create new technologies, place value on deliverables, understand customer needs, network with potential clients, stay informed of the latest trends, and create new business approaches are key to successful information technology startup businesses. The themes derived from this study were, a) disruptive technology; b) value/cost tradeoff; c) agility in technology; and d) data analysis may prove useful for information technology startup owners in their efforts to sustain the firm beyond 5 years. Disruptive technology is a process that information technology business startup owners can use to create new technology in the information technology startups category. Disruptive technology can be breakthroughs that help information technology business owners become market leaders. Tesla has become one of the most valuable automobile brands which has used disruptive technology such as self-driving mode in vehicles to do so. Small information technology startup owners presently use disruptive technology with drone use for detecting the size of a wildfire, inspecting residential rooftops as part of an appraisal process, or the delivery of groceries to residences. Value/cost tradeoff can be useful to information technology startup companies to give incremental deliverables to clients. The incremental deliverables can serve to help clients pay in stages for projects like implementing new cybersecurity system software. Also, the study value/cost tradeoff finding of upgrading as opposed to replacing a preexisting software system is a more reasonably priced approach and a critical professional practice application for a technology startup. Another professional practice value/cost tradeoff application arises in a one or a two person information technology startup that chooses to use agility in technology. Using agility in technology allows small information

technology business owners to efficiently compete with larger information technology firms when deciding to enter new technology markets with their existing minimal human resource expertise.

### **Implications for Social Change**

The implications for social change on new venture modeling strategies could provide insight for information technology startup businesspeople and their customers. Information derived from the study regarding new venture modeling strategies may increase the consumer knowledge and satisfaction with technology and startup businesses that sustain beyond 5 years. In having customer satisfaction and customer retention, a business could sustain (Al Tit, 2015).

Findings concerning new venture modeling strategies may help information technology business startup owners understand the processes essential to successfully meeting customer satisfaction. New venture modeling strategies that lead to customer satisfaction with a brand is a value add that can help a company with good products or services make the competition irrelevant (Wogwu & Hamilton, 2018). An advantage of new venture modeling strategy is sustaining business for an extended period because of customer demand and customer satisfaction for the innovative service a startup company has to offer (Agnihotri, 2015).

Positive social change can impact new venture modeling strategies leading to customer satisfaction and customer retention that can also create a positive identity for the product or services company leaders offer. Positive identity of a company's product or service can lead to customer retention and brand identity which develops positive

attitudes for a product within communities. The association of positive attitudes for a product or service can translate to positive social sentiments in communities that use the product or service; therefore, this process leads to a perspective that is positive when identified by a community of a market segment.

### **Recommendations for Action**

Recommendations for action for information technology startup business owners in California entails the application of new venture modeling strategies and blue ocean strategies for sustaining businesses beyond 5 years. Findings from this study should be used by information technology startup business owners with information to create innovative products and services, newly developed markets in the technology segment, uncontested markets where competition is non-existent, and services that render better outcomes in existing markets. The recommendation is that the innovative initiatives that information technology startup business owners apply should create heightened customer satisfaction and an exceptional impact in the information technology marketplace. Recommendations could apply to information technology startup business owners repeatedly in order to develop a system that continues to generate new trends and innovative technology. I recommend that the findings of this study are made accessible to California-based business groups such as the California Chamber of Commerce branches, technology incubator groups, Small Business Administration branches in California, and reputable online business forums in order to best serve the information technology community with further assessments and application of the data.

### **Recommendations for Further Research**

In further research, a broader demographic could yield results that take into account views of business owners statewide, nationwide, and internationally. Future research could include businesses from a vast geographic range that could substantiate new venture model strategies along with blue ocean strategies in sustaining beyond many years. The information that could derive from further research of new venture model strategies of information technology business startups could help build the validity of past and current research and add to the existing body of information on the topic. As information technology business startups have an important role in the global economy, further research to substantiate blue ocean strategy in this segment is of great benefit to business globally. Modification of the questions asked in further research could also yield valuable information. The study was limited to a qualitative method, a quantitative study could yield useful outcomes for future researchers seeking different data for a different business segment such as technology in healthcare or education. The study was limited to 3 participants who were business owners, further study could include 25 employees of information technology companies and explore the employee perspective regarding sustaining business for 10 years. Other limitations include the types of new venture modeling strategies participants' use, which may not represent the entire information technology industry. The study was limited to the Silicon Valley area of California, further study of information technology business startup owners in other regions of the United States could further the research with valuable information to include to what has been the findings if the study.

### **Reflections**

During my research for this study, the years in the DBA program at Walden University, and through interacting with the information startup business owners who served as participants, my learning evolved. Working through every section of the study and ultimately interviewing the participants, a level of gratification came over me, given the valuable information the participants' shared with me. There was a realization that all the segments leading to the interviews were preparation steps that would broaden my perspective on the topic and allowed me to have the proper appreciation for the participant business owners' insights through the interviews. The information technology startup business owners shared a passion for their companies and a sense of achievement having sustained their businesses for over 5 years. I was fortunate to have no scheduling issues with the participants and grateful to have the participants share their experiences for this study.

### **Conclusion**

The qualitative multiple case study was based on finding what new venture modeling strategies information technology startup business owners use to sustain their businesses beyond 5 years. Three information technology startup business owners from the Silicon Valley area of California who have sustained their businesses over 5 years were interviewed for this study. Findings from this study should be used by information technology startup business owners who desire to create, innovative products and services, newly developed markets in the technology segment, uncontested markets where competition is non-existent, and services that render better outcomes in existing

markets. The themes derived from this study were (a) disruptive technology, (b) value/cost tradeoff, (c) agility in technology, and d) data analysis; these themes may prove useful for information technology startup owners to sustain their businesses beyond 5 years. From the study findings, blue ocean theory when applied to a new venture business in order to create modeling strategies leading to innovative market space that causes the competition to be irrelevant results in business success, through sustaining in the respective business segment. Creating a successful new venture modeling strategy that applies engagement, professionalism, and expertise are key factors to sustain startup information technology firms beyond 5 years.



## References

- Aczel, P. (2015). Case study method. *International Journal of Sales, Retailing & Marketing*, 4, 15-22. Retrieved from <http://www.ijssrm.com/ijssrm/home.html>
- Adelino, M., Schoar, A., & Severino, F. (2015). House prices, collateral, and self-employment. *Journal of Financial Economics*, 117, 288-306.  
doi:10.1016/j.jfineco.2015.03.005
- Agnihotri, A. (2015). Extending the boundaries of blue ocean strategy. *Journal of Strategic Marketing*, 24, 519-528. doi:10.1080/0965254X.2015.1069882
- Agrawal, A., & Cooper, T. (2017). Corporate governance consequences of accounting scandals: Evidence from top management, CFO and auditor turnover. *Quarterly Journal of Finance*, 7(1), 1-41. doi:10.1142/S2010139216500142
- Aguinis, H., Ramani, R. S., & Alabduljader, N. (2018). What you see is what you get? Enhancing methodological transparency in management research. *Academy of Management Annals*, 12, 83-110. doi:10.5465/annals.2016.0011
- Akar, E., Markikyan S., & Dalgic, T. (2019). User roles in online communities and their moderation effect on online community usage intention: An integrated approach. *International Journal of Human-Computer Interaction*, 35, 495-509.  
doi:10.1080/10447318.2018.14653
- Alase, A. (2017). The interpretative phenomenological analysis (IPA): A guide to a good qualitative research approach. *International Journal of Education and Literacy Studies*, 5(2), 9-19. doi:10.7575/aiac.ijels.v.5n.2p.9
- Al-Qaysi, N., Mohamad-Nordin, N., & Al-Emran, M. (2018). A systematic review of

- social media acceptance from the perspective of educational and information systems theories and models. *Journal of Educational Computing Research*, 1, 1-25. doi:10.1177/0735633118817879
- Al-Tit, A. A. (2015). The effect of service and food quality on customer satisfaction and hence customer retention. *Asian Social Science*, 11(23), 129-139. doi:10.5539/ass.v11n23p129
- Arsel, Z. (2017). Asking questions with reflexive focus: A tutorial on designing and conducting interviews. *Journal of Consumer Research*, 44, 939-948. doi:10.1093/jcr/ucx096
- Autrey, R. L., Bova, F., & Soberman, D. A. (2015). When gray is good: Gray market-creating investments. *Production & Operations Management*, 24, 547-559. doi:10.1111/poms.12254
- Barthet, M., Fazekas, G., Allik, A., Thalmann, F., & Sandler, M. (2016). From interactive to adaptive mood-based music listening experiences in social or personal contexts. *Journal of the Audio Engineering Society*, 65, 673-682. doi:10.17743/jaes.2016.0042
- Belk, R. W. (2017). Qualitative research in advertising. *Journal of Advertising*, 46, 36-47. doi:10.1080/00913367.2016.1201025
- Benaroch, M., & Chernobai, A. (2017). Operational IT failures, IT value-destruction, and board-level IT governance changes. *MIS Quarterly*, 41, 729-A6. Retrieved from <https://ssrn.com/abstract=2887773>
- Bocken, N. M. (2015). Sustainable venture capital – catalyst for sustainable start-up

success? *Journal of Cleaner Production*, 108, 647-658.

doi:10.1016/j.jclepro.2015.05.079

Boddy, C. R. (2016). Sample size for qualitative research. *Qualitative Market Research: An International Journal*, 19, 426-432. doi:10.1108/QMR-06-2016-005

Booth, A. (2016). Searching for qualitative research for inclusion in systematic reviews: a structured methodological review. *Systematic reviews*, 5(1), 74.

doi:10.1186/s13643-016-0249-x

Borgman, C. L. (2015). *Big data, little data, no data: Scholarship in the networked world*. Cambridge, MA: MIT Press.

Bravo-Biosca, A., Criscuolo, C., & Menon, C. (2016). What drives the dynamics of business growth? *Economic Policy*, 31, 703-742. doi:10.1093/epolic/eiw013

Bubel, D. (2015). Management of innovations in the aspect of an enterprise organization and creativity of employees. *International Journal of Arts & Sciences*, 8, 163-171.

Retrieved from <https://www.internationaljournal.org/home.html>

Carnevale, F. A. (2016). Authentic qualitative research and the quest for methodological rigour. *Canadian Journal of Nursing Research Archive*, 34(2), 121-128. Retrieved from <https://cjr.archive.mcgill.ca/>

Cavalcanti, M. F. R. (2017). Guidelines for qualitative research in organization studies: Controversy and possibilities. *Adminstracao: Ensino e Pedsquisa*, 18, 457-488.

doi:10.13058/raep.2017.v18n3.522

Christofi, M., Leonidou, E., Vrontis, D., Kitchen, P., & Papasolomou, I. (2015).

Innovation and cause-related marketing success: A conceptual framework and

propositions. *Journal of Services Marketing*, 29, 354-366.

doi:10.1108/JSM-04-2014-0114

Cook, P. J. (2016). Leading innovation, creativity, and enterprise. *Industrial & Commercial Training*, 48, 294-299. doi:10.1108/ICT-01-2016-0006

Couper, M. P. (2017). New developments in survey data collection. *Annual Review of Sociology*, 43, 121-145. doi:10.1146/annurev-soc-060116-053613

Davidsson, P. (2015). Entrepreneurial opportunities and the entrepreneurship nexus: A re-conceptualization. *Journal of Business Venturing*, 30, 674-695.

doi:10.1016/j.jbusvent.2015.01.002

Davidsson, P., Recker, J., & Von Briel, F. (in press). External enablement of new venture creation: A framework. *Academy of Management Perspectives*.

doi:10.5465/amp.2017.0163

Deligianni, I., Voudouris, I., & Lioukas, S. (2015). Growth paths of small technology firms: The effects of different knowledge types over time. *Journal of World Business*, 50, 491-504. doi:10.1016/j.jwb.2014.08.006

Dikko, M. (2016). Establishing construct validity and reliability: Pilot testing of a qualitative interview for research in takaful (Islamic insurance). *The Qualitative Report*, 21, 521-528. Retrieved from <https://nsuworks.nova.edu/tqr>

Ebel, P., Bretschneider, U., & Leimeister, J. M. (2016). Leveraging virtual business model innovation: A framework for designing business model development tools. *Information Systems Journal*, 26, 519-550. doi:10.1111/isj.12103

Elfarmawi, W. (2019). Correlation between customer relationship management system

- usage, product innovation, and customer satisfaction. *Foundations of Management*, 11(1), 23-32. doi:10.2478/fman-2019-0002
- Fillingim, W. A. (2018). Small business sustainability strategies (Doctoral dissertation). Retrieved from <https://scholarworks.waldenu.edu/dissertations/5702/>
- Fujimoto, T. (2001). Introduction to production management. Tokyo, Japan; Nihon Keizai Shimbuisha
- Fusch, P. I., & Ness, L. R. (2015). Are we there yet? Data saturation in qualitative research (1052-0147). *The Qualitative Report* 20, 1408-1416. <https://nsuworks.nova.edu/tqr>
- Gao, H., Tate, M., Zhang, H., Chen, S., & Liang, B. (2018). Social media ties strategy in international branding: An application of resource-based theory. *Journal of International Marketing*, 26(3), 45-69. doi:10.1509/jim.17.0014
- Gelbard, R., Ramon, G. R., Carmeli, A., Bittmann, R. M., & Talyansky, R. (2018). Sentiment analysis in organizational work: Towards an ontology of people analytics. *Expert Systems*, 35(5),1. doi:10.1111/exsy.12289
- Giones, F., & Brem, A. (2017). From toys to tools: the co-evolution of technological and entrepreneurial developments in the drone industry. *Business Horizons*, 60, 875-884. doi:10.1016/j.bushor.2017.08.001
- Groesser, S. N., & Jovy, N. (2016). Business model analysis using computational modeling: A strategy tool for exploration and decision-making. *Journal of Management Control* 27, 61-88. doi:10.1007/s00187-015-0222-1
- Gunasekaran, A., Subramanian, N., & Rahman, S. (2015). Supply chain resilience: role

- of complexities and strategies. *International Journal of Production Research* 53, 6809-6819. doi:10.1080/00207543.2015.1093667
- Hackmann, C. S., & Maedche, A. (2018). IT ambidexterity for business processes: The importance of balance. *Business Process Management Journal*, 24, 862-881. doi:10.1108/BPMJ-04-2016-0078
- Haikel-Elisabeh, M., Zhao, Z., Ivens, B., & Brem, A. (2019). When is brand content shared on Facebook? A field study on online Word-of-Mouth. *International Journal of Market Research*, 61, 287-301. doi:10.1177/1470785318805301
- Hammersely, M. (2018). What is ethnography? Can it survive? Should it? *Ethnography and Education*, 13(1), 1-17. doi:10.1080/17457823.2017.1298458
- Harney, B., & Trehy, J. (2016). Resource-based view. In A. Wilkinson & S. Johnstone (Eds.), *Encyclopedia of Human Resource Management* (pp. 377-378). Cheltenham, UK: Edward Elgar Publishing Limited.
- Henry, P. (2015). Rigor in qualitative research: Promoting quality in social science research. *Research Journal of Recent Sciences*, 4(IVC2015), 25-28. Retrieved from <http://www.isca.in/rjrs/Introduction.php>
- Holstein, A. D., & Eschenfelder, M. J. (2017). Economic analysis of public support for technology startups: A case study of Pittsburgh. *Journal of Business & Behavioral Sciences*, 29, 100-115. Retrieved from <http://asbbs.org/>
- Holzmann, V., & Golan, J. (2016). Leadership to creativity and management of innovation? The case of the innovation club in a production company. *American Journal of Industrial and Business Management*, 6, 60-71.

doi:10.4236/ajibm.2016.61005

Honan, E., & Bright, D. (2016). Writing a thesis differently. *International Journal of Qualitative Studies in Education*, 29, 731-743.

doi:10.1080/095/18398.2016.1145280

Houghton, C., Casey, D., Show, D., & Murphy, K. (2013). Rigour in qualitative case-study research. *Nurse researcher* 20(4). doi:10.7748/nr.22.58.e1307

Hyder, S., & Lussier, R. N. (2016). Why businesses succeed or fail: A study on small businesses in Pakistan. *Journal of Entrepreneurship in Emerging Economies*, 8, 82-100. doi:10.1108/JEEE-03-2015-0020

Ivankora, N., & Wingo, N. (2018). Applying methods in action research: Methodological potentials and advantages. *American Behavioral Scientist*, 62, 978-997.

doi:10.1177/0002764218772673

Jackson, S. A., Gopalakrishna-Remani, V., Mishra, R., & Napier, R. (2016). Examining the impact of design for environment and the mediating effect of quality management innovation on firm performance. *International Journal of Production Economics*, 173, 142-152. doi:10.1016/j.ijpe.2015.12.009

Jacob, S. A., & Furgerson, S. P., (2012). Writing interview protocols and conducting interviews: Tips for students new to the field of qualitative research. *Qualitative Report*, 17(6). Retrieved from <http://www.nova.edu/ssss/QR/QR17/jacob.pdf>

Jimenez, A., & Zheng, Y. (2018). Tech hubs, innovation and development. *IT for development*, 24, 95-118. doi:10.1080/02681102.2017.1335282

Jordan, K. (2018). Validity, reliability, and the case for participant-centered research:

- Reflections on a multi-platform social media study. *International Journal of Human Computer Interaction*, 34, 913-921. doi:10.1080/10447318.2018.1471570
- Kallio, H., Johnson, M., & Kangasniemi, M. (2016). Systematic methodological review: Developing a framework for a qualitative semi-structured interview guide. *Journal of Advanced Nursing*, 72, 2954-2965. doi:10.1111/jan.13031
- Kawakami, T., Barczak, G., & Durmusoglu, S. (2015). IT tools in new product development: The impact of complementary resources. *Journal of Product Innovation Management*, 32, 622-635. doi:10.1111/jpim.12244
- Khan, H. U., Daud, A., Ishfaq, U., Amjad, T., Aljohani, N., Abbasi, R. A., & Alowibdi, J. S. (2017). Modelling to identify influential bloggers in the blogosphere: A survey. *Computers in Human Behavior*, 68, 64-82. doi:10.1016/j.chb.2016.11.012
- Khaola, P., & Ndovorwi, T. (2015). Beyond the theory of planned behavior – viewing entrepreneurial intent through the lens of economic powerlessness. *Journal of Enterprising Culture*, 23, 501-518. doi:10.1142/S0218495849581550017X
- Kim, W. C., & Mauborgne, R. (2015). *Blue Ocean Strategy: How to create uncontested market space and make the competition irrelevant*. Boston, MA: Harvard Business School Press.
- Kirkpatrick, K. (2015). The moral challenges of driverless cars. *Communications of ACM*, 58, 19-20. doi:10.1145/2788477
- Kremer, G. E., Haapala, K., Murat, A., Chinnam, R. B., Kim, K. Y., Monplaisir, L., & Lei, T. (2016). Directions for instilling economic and environmental sustainability across product supply chains. *Journal of Cleaner Production*, 112, 2066-2078.



doi:10.1016/j.jclepro.2015.07.06

- Kruger, J. (2017). Revisiting the world technology frontier: A directional distance function approach. *Journal of Economic Growth*, 22, 67-95. doi:10.1007/s10887-016-9136-5
- Lakshmi, S., & Mohideen, M. A. (2013). Issues in reliability and validity of research. *International Journal of Management Research and Reviews*, 3, 2752-2758. Retrieved from <http://www.ijmrr.com>
- Lee, Y. C. (2018). Factors in cyber bullying: The attitude-social influence-efficacy model. *Anales De Psicología*, 34, 324-331. doi:10.6018/analesps.34.2.295411
- Leischnig, A., Ivens, B. S., & Kammerlander, N. (2017). A new conceptual lens for marketing: A configurational perspective based on the business model concept. *AMS Review*, 7(3-4), 138-153. doi:10.1007/s13162-017-0107-6
- Leung, L. (2015). Validity, reliability, and generalizability in qualitative research. *Journal of family medicine and primary care*, 4, 324. doi:10.4103/2249-4863.161306
- Lewis, S. (2015). Qualitative inquiry and research design: Choosing among five approaches. *Health Promotion Practices*, 16, 473-475. doi:10.1177/1524839915580941
- Li, T., Liu, X., Pan, J., & Zhou, G. (2017). The interactive effect of facial appearance and behavior statement on trust belief and trust behavior. *Personality and Individual Differences*, 117(15), 60-65. doi:10.1016/j.paid.2017.05.038
- Littlechild, S. (2018). Regulation and the nature of competition. *Journal of Air Transport*

*Management*, 67, 211-223. doi:10.1016/j.jairtraman.2017.03.003

Loebbecke, C., & Picot, A. (2015). Reflections on societal and business model transformation arising from digitization and big data analytics: A research agenda. *The Journal of Strategic Information Systems* 24, 149-157.  
doi:10.1016/j.sis.2015.08.002

Macznik, A. K., Ribeiro, D. C., & Baxter, G. D. (2015). Online technology use in physiotherapy teaching and learning: a systemic review of effectiveness and users' perceptions. *BMC Medical Education*, 15(1), 1-12.  
doi:10.1186/s12909-015-0429-8

Mai, J. E. (2017). *Looking for information: A survey of research on information seeking, needs, and behavior*. Oxford, UK: Elsevier, Ltd.

Malterud, K., Siersma, V. D., & Guassora, A. D. (2016). Sample size in qualitative interview studies: guided by information power. *Qualitative health research* 26(13), 1760. doi:10.1177/1049732315617444

Marshall, B., Cardon, P., Poddar, A., & Fontenot, R. (2013). Does sample size matter in qualitative research?: A review of qualitative interviews in IS research. *Journal of Computer Information Systems*, 54(1), 11-22.  
doi:10.1080/08874417.2013.11645667

Marshall, C., & Rossman, G. B. (2016). *Designing qualitative research* (6<sup>th</sup> ed.). Thousand Oaks, CA: Sage Publications, Ltd.

Mason, J. (2017). *Qualitative researching* (3<sup>rd</sup> ed.). London, UK: Sage Publications, Ltd.

McAllister, L., Srinivasan, R., Jindal, N., & Canella, A. A. (2016). Advertising

- effectiveness: The moderating effect of firm strategy. *Journal of Marketing Research (JMR)*, 53(2), 207-224. doi:10.1509/jmr.13.0285
- Mchawrab, S. (2016). M&A in the high tech industry: Value and valuation. *Strategic Direction*, 32(6), 12-14. doi:10.1108/SD-032016-0036
- McKinley, J., Houke, C., Kizer, L., & Raynor III, W. (2017). Blue ocean MBA's in the era of wicked problem disruption from automation, robotics, & artificial intelligence. *Business Education Innovation Journal*, 9(2), 80-87. Retrieved from <http://www.beijournal.com/>
- Mealer, M., & Jones, J. (2014). Methodological and ethical issues related to qualitative telephone interviews on sensitive topics. *Nurse Researcher*, 21, 32-37. doi:10.7748/nr2014.03.21.4.32e1229
- Migala, S., & Flick, U. (2019). Cultural and individual barriers to palliative care from different angles: Data triangulation in practice. *Qualitative Inquiry*, 25, 786-798. doi:10.1177/1077800418809475
- Mills, J., Harrison, H., Franklin, R., & Birks, M. (2017). Case study research: Foundations and methodological orientations. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research* 18(1), 1-17. doi:10.17169/fqs-18.1.2655
- Miracle, V. A. (2016) The Belmont report: The triple crown of research ethics. *Dimensions of Critical Care Nursing*, 35, 223-228. doi:10.1097/DCC.0000000000000186
- Moser, A., & Korstjens, I. (2018). Series: Practical guidance to qualitative research. Part

- 3: Sampling, data collection and analysis. *European Journal of General Practice*, 24(1), 9-18. doi:10.1080/13814788.2017.1375091
- Mozaffari, N., Peyrovi, H., & Nayeri, N. D. (2015). The social well-being of nurses shows a thirst for a holistic support: A qualitative study. *International Journal of Qualitative Studies on Health and Well-being*, 10, 1-8. doi:10.3402/qhw.v10.2779
- Namegayo-Funa, A., Rimando, M., Brace, A. M., Christiana, R. W., Fowles, T. L., Davis, T. L., Martinez, L. M., & Sealy, D. (2014). Recruitment in qualitative public health research: Lessons learned during dissertations sample recruitment. *The Qualitative Report*, 19(4), 1-17. Retrieved from <https://nsuworks.nova.edu/tqr/>
- Natow, R. S. (2019). The use of triangulation in qualitative studies employing elite interviews. *Qualitative Research*, 19, 1-14. doi:10.1177/1468794119830077
- Nelson, J. (2017). Using conceptual depth criteria: addressing the challenge of reaching saturation in qualitative research. *Qualitative Research*, 17, 554-570. doi:10.1177/1468794116679873
- Newell, S. (2015). Managing knowledge and managing knowledge work: what we know and what the future holds. *Journal of IT*, 30(1), 1-17. doi:10.1057/jit.2014.12
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13. doi:10.1177/1609406917733847

Oswald, A. G. (2019). Improving outcomes with qualitative data analysis software: A reflective journey. *Qualitative Social Work, 18*, 436-442.

doi:10.1177/1473325017744860

Palao, J. M., Hastie, P. A., Cruz, P. G., & Ortega, E. (2015). The impact of video technology on student performance in physical education. *Technology, Pedagogy, and Education, 24*, 51-63. doi:10.1080/1475939X.2013.813404

Palinkas, L. A., Horwitz, S. M., Green, C. A., Wisdom, J. P., Duan, N., & Hoagwood, K. (2015). Purposeful sampling for qualitative data collection and analysis in mixed method implementation research. *Administration and Policy in Mental Health and Mental Health Services Research, 42*, 533-544. doi:10.1007/s10488-013-0528-y

Pappas, N. (2017). The complexity of purchasing intentions in peer-to-peer accommodation. *International Journal of Contemporary Hospitality Management, 29*, 2302-2321. doi:10.1108/IJCHM-08-2016-0429.

Paulus, T., Woods, M., Atkins, D. P., & Macklin, R. (2017). The discourse of QDAS: Reporting practices of ATLAS.ti and NVivo users with implications for best practices. *International Journal of Social Research Methodology, 20*(1), 35-47. doi:10.1080/13645579.2015.1102454

Park, J., & Park, M. (2016). Qualitative versus quantitative research methods: Discovery or justification? *Journal of Marketing Thought, 3*(1), 1-7. doi:10.15577/jmt.2016.03.01.1

Parker, L. D., & Northcott, D. (2016). Qualitative generalizing in accounting research:

- Concepts and strategies. *Accounting, Auditing & Accountability Journal*, 29, 1100-1131. doi:10.1108/AAAJ-04-2015-2026
- Percy, W. H., Kostere, K., & Kostere, S. (2015). Generic qualitative research in psychology. *The Qualitative Report*, 20, 76-85. Retrieved from <https://nsuworks.nova.edu/tqr/>
- Peterson, M. (2014). Interviewing international students to understand the process of expatriate acculturation. *Marketing Education Review*, 24, 59-62. doi:10.2753/MER1052-8008240110
- Porter, M. E., & Millar, V. E. (1985). *How information gives you competitive advantage*. Boston: Harvard Business Review.
- Ragab, M. A. F., & Arisha, A. (2013). Knowledge management and measurement: a critical review. *Journal of Knowledge Management*, 17, 873-901. doi:10.1108/JKM-12-2012-0381
- Reynolds, P., & Yetton, P. (2015). Aligning business and IT strategies in multi-business organizations. *Journal of International Technology* 30(2), 101-118. doi:10.1057/jit.2015.1
- Salunkhe, S., & Kadam, S. (2018). Design thinking: An approach for bridging the gap between industry and academics. *CLEAR International Journal of Research in Commerce & Management*, 9(9) 1-6. doi:10.1142/S0219877014400057
- Sanchez, J. M. (2017). The information technology revolution and the unsecured credit market. *Econ Inq*, 56:914-930. doi:10.1111/ecin.12519
- Santisteban, J., & Mauricio, D. (2017). Systematic literature review of critical success

- factors of information technology startups. *Academy of Entrepreneurship Journal*, 23(2), 1-23. Retrieved from <https://www.abacademies.org/journals/academy-of-entrepreneurship-journal-home.html>
- Sanusi, I. T., Olaleye, S. A., & Atjonen, P. (2017). Assessment of innovative entrepreneurship education in Nigerian tertiary institutions. *Journal of Entrepreneurship Education*, 20(2), 1-17. Retrieved from <https://www.abacademies.org/journals/journal-of-entrepreneurship-education-home.html>
- Saunders, B., Sim, J., Kingstone, T., Baker, S., Waterfield, J., Bartlam, B., ... & Jinks, C. (2018). Saturation in qualitative research: exploring its conceptualization and operationalization. *Quality & Quantity*, 52, 1893-1907. doi:10.1007/s11135-017-0574-8
- Sharafizad, J., & Coetzer, A. (2016). Women business owners' start-up motivations and network content. *Journal of Small Business and Enterprise Development*, 23(2), 590-610. doi:10.1108/JSBED-07-2015-0085
- Silverman, D. (2015). *Interpreting qualitative data: Methods for analyzing talk, text, and interaction*. Thousand Oaks, CA: Sage.
- Stage, F. K., & Manning, K. (2015). What is your research approach? In F. K. Stage & K. Manning (Eds), *Research in the College Context: Approaches and Methods* (pp. 29-54). New York, NY: Routledge.
- Suki, N. M. (2013). Green awareness effects on consumers' purchasing decision: Some insights from Malaysia. *International Journal of Asia-Pacific Studies*, 9(2), 49-63.

Retrieved from <http://ijaps.usm.my/>

Sulayman, M., Mendes, E., Urquhart, C., Riaz, M., & Tempero, E. (2014). Towards a theoretical framework of SPI success factors for small and medium web companies. *Information and Software Technology*, 56(7), 807-820.  
doi:10.1016/j.infsof.2014.02.006

Swapana, M., & Padmavathy, C. (2017). Factors influencing dependency on smartphone and the impact on purchase behaviour: An empirical research. *International Journal of E-Business Research (IJEER)*, 13(2), 79-92.  
doi:10.4018/IJEER.2017040105

Tavana, M., Di Caprio, D., & Santos-Arteaga, F. J. (2018). An extended stochastic VIKOR model with decision maker's attitude towards risk. *Information Sciences*, 432, 301-318. doi:10.1016/j.ins.2017.12.019

Topkaya, N. (2015). Factors influencing psychological help seeking in adults: A qualitative study. *Educational Sciences: Theory and Practice*, 15(1), 21-31. Retrieved from <http://www.estp.com.tr/>

Trainor, A. A., & Grane, E. (2014). Evaluating rigor in qualitative methodology and research dissemination. *Remedial and Special Education*, 35, 267-274.  
doi:10.1177/074193251428100

Tyrer, P., Reed, G. M., & Crawford, M. J. (2015). Classification, assessment, prevalence, and effect of personality disorder. *The Lancet*, 386, 717-726.  
doi:10.1016/S0140-6736(14)61995-4

U.S. Small Business Administration. (2018). Frequently asked questions. Retrieved from



[https://www.sba.gov/sites/default/files/FAQ\\_March\\_2015\\_0](https://www.sba.gov/sites/default/files/FAQ_March_2015_0)

U.S. Department of Health & Human Services, Ethical Codes and Research Standards

(2016). *Belmont Report: Ethical Principles and Guidelines for the Protection of Human Subjects of Research*. Retrieved from

<https://www.hhs.gov/ohrp/international/ethical-codes-and-research-standards/index.html>

Van Griensen, H., Moore, A. P., & Hall, V. (2014). Mixed methods research – The best of both worlds? *Manual Therapy*, 19, 367-371. doi:10.1016/j.math.2014.05.005

Van Maanen, J. (2015). The present of things past: Ethnography and career studies.

*Human Relations*, 68(1), 35-53. doi:10.1177/0018726714552287

Varho, V., & Tapio, P. (2013). Combining the qualitative and quantitative with the Q2

scenario technique – The case of transport and climate. *Technological*

*Forecasting and Social Change*, 80, 611-630. doi:10.1016/j.techfore.2012.09.004

Varsei, M., & Polakovsky, S. (2017). Sustainable supply chain network design: A case of the wine industry in Australia. *Omega*, 66, 236-247.

doi:10.1016/j.omega.2015.11.009

Von Briel, F., Davidsson, P., & Recker, J. (2018). Digital technologies as external

enablers of new venture creation in the IT Hardware sector. *Entrepreneurship:*

*Theory & Practice*, 42, 47-69. doi:10.1177/1042258717732779

Wada, T. (2018). Capability-based cost leadership strategy of Japanese firms. *Annals of*

*Business Administration Science* 17(1), 1-10. doi:10.7880/abas.0171083

Wallace, M., & Sheldon, N. (2015). Business research ethic: Participant observer

perspectives. *Journal of Business Ethics*, 128, 267-277.

doi:10.1007/s10551-014-2102-2

Wali, A. F., Uduma, I. A., & Wright, L. T. (2016). Customer relationship management (CRM) experiences of business-to-business (B2B) marketing firms: A qualitative study. *Cogent Business & Management*, 3(1), 1-22.

doi:10.1080/23311975.2016.1183555.

Wang, Y., & Baker, R. (2015). Content or platform: Why do students complete MOOCs. *MERLOT Journal of Online Learning and Teaching*, 11(1), 17-30. Retrieved from <http://jolt.merlot.org/>

Wang, R. J. H., Malthouse, E. C., & Krishnamurthi, L. (2015). On the go: How mobile shopping affects customer purchase behavior. *Journal of Retailing*, 91, 217-234.

doi:10.1016/j.jretai.2015.01.002

Wahyuni, D. (2012). The research design maze: Understanding paradigms, cases, methods and methodologies. *Journal of applied management accounting research*, 10(1), 69-80.

Warnecke, T. (2017). Social innovation, gender, and technology. Bridging the resource gap. *Journal of Economic Issues (Taylor & Francis Ltd)*, 51, 305-314.

doi:10.1080/00213621.2017.1320508

Webb, E. (2015). A contract manager abroad: Cultural awareness in Asia. *Proceedings of the Institution of Civil Engineers-Management, Procurement and Law*, 168, 261-268. doi:10.1680/jmapl.15.00034

Wiid, J. A., Cant, M. C., & Le Roux, Z. (2015). Loyalty to SMEs: A Pipe Dream in the

- Current Economic Climate? *Journal of Applied Business Research (JABR)*, 32, 101-110. doi:10.19030/jabr.v32i1.9526
- Wogwu, V. E., & Hamilton, D. I. (2018). Reconfiguration capability and competitive advantage: A study of Port Harcourt public health sector. *Management*, 8, 47-53. doi:10.5923/j.mm20180802.02
- Xitong, L., & Wu, L. (2018). Herding and social media word-of-mouth: Evidence from Groupon. *MIS Quarterly*, 42, 1331-1351. doi:10.25300/MISQ/2018//14108
- Yin, R. K. (2017). *Case study research and applications: Design and methods*. Thousand Oaks, CA: Sage Publications Inc.
- Yuliaty, F. (2017). Employee empowering through IT and creativity in organizations. *Journal of Economic & Management Perspectives*, 11(3), 54-59. Retrieved from <http://jemp.org/journal-of-economic-and-management-perspectives/>

## Appendix A: Interview Protocol

This is a study to examine new venture modeling strategies of information technology startup businesses. The Interview Protocol for this study is set forth herein. The researcher utilizes the Interview Protocol to provide information to the interviewees concerning the steps of the interview process.

Prior to the interview, the researcher will:

- \* Send an invitation by email to potential interviewees to take part in the study.
- \* Provide the interview protocol, consent form, and the interview questions of the study to the potential interviewees.
- \* Request that the potential interviewees confirm receipt of the interview documents via email and confirm understanding of the interview protocol.
- \* Set the time and date for the telephone interview.
- \* Provide answers to any questions or concerns the potential interviewees have.

During the interview sessions, the researcher will:

- \* Secure the signed consent form by email, if consent form was not received earlier.
- \* Confirm that the participant agrees with the recording of the interview.
- \* Confirm that the participant is aware of their right to voluntarily withdraw, at any time from the interview without having to provide any reason for doing so.
- \* Inform the participant that any reference to their identity or the identity of any company will be confidential. Any responses, themes, and quotes derived from the interview will not specify participant's identity or company name.
- \* Each participant will have all their questions and concerns answered.

After the interview, the researcher will:

- \* Thank the participant for their participation and contribution to the study.
- \* Answer any questions, comments, or concerns from the participant.
- \* Transcribe the responses from the interview into a written document.
- \* Perform a transcription review and provide a member-checking summary. Then follow through with sending the member-checking summary via email to the participant.
- \* I will telephone each participant after sending the member-checking summary to confirm that all the information from the interview was accurately recorded.
- \* Attain confirmation of accuracy of the interpretation of participants' responses by email or telephone call.
- \* Save all paper documents as support documents in a digital format and dispose of all paper documents.

After the publication, the researcher will:

- \* Forward the summary of finding and electronic copy of the study in its completion to all participants upon request from the participants.
- \* Inform the participant by email of the publication of the study if a copy was not requested by the participant.
- \* Send electronic copies of the completed study and summary of findings to selected information technology startup business owners in the United States.